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# TYPOGRAPHY AND MECHANICS OF THE NEWSPAPER

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# PREFACE

The lack of any text covering the subject of newspaper typography and mechanics has led the author to bring together this subject matter partly for classroom purposes, partly as an aid to the beginner in newspaper work, and partly as a practical handbook for those actively engaged in the craft.

For teachers of journalism it is hoped this text will provide a teachable course; it represents the material which the author has found practical to include in his own courses in newspaper and advertising typography.

For the beginners in newspaper work it is hoped this presentation may give them that "running start" which the author himself lacked when he first began newspaper work and found himself handicapped by his inability to work with type and his lack of knowledge of the mechanical end of his business.

To those actively engaged in newspaper work—editors, publishers, advertisers, and printers—it is hoped that this discussion may make some little contribution to that study which all of them are making—how to produce more interesting and attractive newspapers. The material here presented has largely been drawn from the writer's own experience on newspapers ranging from country weeklies to metropolitan dailies, a good deal of it from his own work as make-up editor on a "big city" daily, supplemented by several years of research and teaching in this field.

The author is well aware that many of the questions of newspaper typography and make-up which he has discussed are a matter of personal taste. If he has attempted to reduce some of these practices to rules, it has not been with the purpose of setting up any arbitrary standards, but merely as a means of giving the student some working basis upon which to build.

The material brought together here is not designed as a manual for the teaching of printing. Only enough printing instruction has been included to enable the newspaper worker to understand the problems of the composing room and to give him some little idea of how to work with type to create better newspapers.

Grateful acknowledgment is made to Professor Willard Grosvenor Bleyer, director of the School of Journalism at the University of Wisconsin, at whose suggestion this work was first undertaken and whose helpful advice has played a large part in the writing of this book; to Professor Grant M. Hyde, of the University of Wisconsin School of Journalism, who read the original manuscript and made many practical suggestions; to Mr. G. W. Tanner, superintendent of the *Daily Cardinal* printing plant and instructor in typography at the University of Wisconsin, who read the chapters relating to printing, composing machines, and presses; to Mr. J. L. Frazier, editor of *The Inland Printer,* for his suggestions on the use of type faces and his permission to reproduce illustrations and quotations from his *Type Lore;* to Mr. Joseph C. Sexton, of the Cantwell Printing Company, Madison, Wisconsin, who read the chapter on "Type Faces and How to Use Them."

The author is also indebted to the American Type Founders Company for illustrations of composing room and pressroom equipment; to the Chandler and Price Company for photographs of its presses; to the Goss Printing Press Company for pictures of stereotyping equipment and presses; to R. Hoe and Company, Inc., for permission to reproduce pictures of early presses and for much valuable information on the historical development of the printing press; to Barnhardt Brothers and Spindler for the illustration of the Babcock cylinder press; to the Mergenthaler Linotype Company for illustrations of the linotype and its operation and for permission to reproduce the picture of the Gutenberg press from the *Linotype Bulletin;* to the Ludlow Typograph Company for information and pictures of the new electric Elrod lead, slug, and rule caster and of the Ludlow typograph; to the Lanston Monotype Company for photographs of the monotype; to the Wood Machinery Corporation for pictures of the automatic autoplate and the junior autoplate with shaver; and to the Hacker Manufacturing Company for the illustration of the Potter proof press.

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K. E. O.

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# TYPOGRAPHY AND MECHANICS OF THE NEWSPAPER

## CHAPTER I

### TOOLS FOR THE NEWSPAPER MAN

TO fit himself for advancement in the newspaper field, the student or the beginner who is "learning the ropes" needs to know everything he can about his work.

He will not have been long on his job before he will come in contact with the mechanical side of his business, and there perhaps more than any other place he probably will find himself entirely at sea. The composing room, the stereotyping and press rooms, and the engraving department are just a maze of wheels and whirring machinery, and the language of their busy workmen is like so much Greek to him.

Time was when most newspaper men were graduated from the "back shop." They learned the mechanical end of newspaper making first through a long apprenticeship at the case. But today each field is highly specialized. The young newspaper worker who has obtained his first job on the rim of a copy desk or in the display or classified advertising departments can hardly think of going back to serve a five-year apprenticeship in order to learn the printing end of his business. And it is not necessary for every editor or subeditor also to be an experienced printer. But unless he very soon acquires an understanding of these mechanical processes as they are related to his work, he will find himself woefully handicapped.

Half the work of publishing a newspaper or of getting an advertisement into print is a printing job, and this whole big business of modern newspaper making and advertising is just as dependent upon the art of printing as early journalism ever was. Whether the student is going into editorial or advertising work,

a knowledge of at least the fundamental principles of typography, layout, and the mechanics of printing is absolutely necessary for success.

### KNOWLEDGE OF TYPE AN AID TO EDITORS

To the young man or woman who hopes to become a desk editor or department editor, the knowledge of how to use type is indispensable. Without that knowledge one cannot successfully edit copy, write headlines, direct the make-up of pages, or work out intelligently new ideas in design.

The work of the desk or department editor, as a matter of fact, demands that he act as a director of the printers who do the actual work of putting his news stories and his pages together. In order to direct them intelligently he must understand their work and the problems with which they have to contend; he must be able to talk their language so that he can specify type, rules, borders, kinds of engravings, varieties of indention and type arrangement, and all the other details of make-up with a certainty that the printers will understand his wishes and carry them out as he planned.

The increasing importance that newspapers are placing on the physical appearance and readability of their pages makes it more than ever imperative for the newspaper worker to underderstand how type can be used effectively to create interesting pages.

There are some newspapers so bright and clean looking, so orderly in the arrangement of their type and news matter, so easy to read, so sparkling in interest that they fairly draw the reader into their pages. There are far too many others whose faces are so smeared with black ink, whose pages are so cluttered up with a disorderly arrangement of headlines and stories that even though they shout at the tops of their voices the reader unconsciously feels that he can have little interest in anything they might have to say. Newspaper publishers are beginning to realize that the quality of their news and editorial matter is often judged by the typographic appearance of their papers, and because of this discovery they are devoting an increasing attention to this phase of newspaper production. They have found out that readers as well as advertisers prefer the newspaper that takes pride in its appearance.

It is not long ago that all questions of type and make-up for newspapers were left to the printers in the composing room, who often had no interest other than to get the paper out on the street as quickly as possible. But today the direction of this important work is being taken out of the composing room and given to the editorial staff. Now, news editors or special make-up editors, often city editors or telegraph editors, plan the make-up of their papers. Department editors are charged with the responsibility of laying out their own pages. It has become almost necessary to know how to use type in order to rise to any of the executive positions on the news staff of a paper.

To the average layman, the most impressive thing about a newspaper plant is the view he gets, through the big plate glass windows, of the huge presses rolling out their thousands of copies an hour. The newspaper worker does not pay much attention to that. He knows that it is but the final step in the making of a newspaper, and he realizes something that the layman does not—the tremendous amount of work that has gone into the making of the paper before it ever gets to the presses. And yet, those presses, after all, are the center of the entire newspaper production. Those presses, likewise, represent the largest single item of capital investment in the plant. The editorial worker is often prone to minimize the importance of the mechanical side of newspaper publishing, but it must be remembered that a newspaper office is really a great manufacturing plant. To the publisher, those mechanical processes are just as important as any of the work of the editorial staff. In fact, the difference between profit and loss often lies in the efficient management of composing room and press room. It is there that the largest costs of newspaper making are involved. It is there that efficiency experts strive to shave off seconds from the time needed for different mechanical processes. Mounting costs of production have made it necessary for newspaper publishers to watch more than ever the mechanical side of their business. Any young man who has ambitions to advance to a higher executive position on a paper, or perhaps to acquire his own paper, will do well to obtain a thorough understanding of the printing side of his business. In fact, only the man who understands both sides of his business is qualified to become a publisher.

Many a young editor suddenly placed in a position of re-

sponsibility involving a direction of production processes has found himself woefully handicapped because of lack of this knowledge. The young man or woman who expects to succeed in the newspaper field will find a knowledge of typography and printing processes of great advantage. It is not necessary to know how to "stick type" with the precision of a union printer, but a knowledge of the nature, possibilities, and limitations of type is one of the most valuable things that a newspaper worker can possess.

### TYPE FACES MAKE HELPFUL FRIENDS

The study of type faces and how to use them is in itself a fascinating one. Faces of type are like the faces of men and women. Each has its own expression, its own peculiarities, its own little twists and quirks that help to identify it. To the printer, each type face has its own individuality. He knows type faces as the layman knows the faces of his friends. To the newspaper man or advertiser beginning this study there opens up a new world peopled by interesting and helpful friends —type faces with which he can work and which in time he will come to consider almost as things alive.

Each type face has certain tasks for which it is especially fitted. There are a good many common laborers that are fit only for an everyday job, but there are many others that might well be compared to highly skilled artizans fitted for specialized tasks. There are some good all-round workmen that can fit in almost everywhere. There are others whose very presence breathes a spirit of grace and refinement; others again that lend strength and character to any message.

There are hundreds of different type faces listed in the type catalogues, and to the beginner this array may seem absolutely bewildering. But it is not necessary to know even a tenth of them, for a very few faces are doing most of the printing work in this country. The others are used only on rare occasions. If the student can get acquainted with a good handful of the best faces available today he will have at his command tools to accomplish almost any typographic purpose.

The student of journalism can hardly hope to learn all there is to know about typography and the printing processes. To accomplish that would require years. And it is not necessary that

he do so. But it is essential, if he would succeed in his chosen work, that he become acquainted with at least the fundamentals of these mechanical processes. The succeeding pages of this text will take up these fundamentals in an effort to equip the reader with the facts which are most essential and which will be of greatest help to him in his work.

## CHAPTER II

### THE HISTORY OF PRINTING

NEWSPAPER men today have at their command printing processes that are marvelous in their accomplishment, ingenious machines that are almost human in their performance. These are their inheritance from long centuries of patient experiment and development. To understand better the tools with which he has to work, the student of journalism should know something of the historical background of printing and of the development that has made his profession possible.

The history of printing is almost the history of civilization, for only through being able to communicate with others has man been able to progress. How long it took man to develop a spoken language we do not know, but very soon there must have arisen the need for communicating with persons who were not within reach of the human voice. There were, no doubt, orders to be given to absent members of the tribe; there was information to be imparted; there were, likewise, records to be preserved.

The first stage in the development of a written language was what has been called the mnemonic, or memory-aiding, stage, in which objects representing ideas were used to convey messages. The Chinese and the Peruvians kept records and sent messages by means of knotted cords, the number and arrangement of knots and the colors of the cords making possible a considerable range of expression. In much the same class were the notched sticks of the North American Indians, the tally sticks of the early Danes and the English, and the strings of wampum of the New England Indians.

Then man discovered that it was easier to send pictures of the objects intended to convey the message than to send the objects themselves, and thus there was ushered in the second stage—the era of the pictograph. Archeologists have unearthed many interesting examples of the pictographs of primitive man

—rude pictures of mammoths, bears, and tigers, scratched or painted on the walls of caves or on the flat surfaces of spreading antlers or pieces of bone. Records of the chase have come down to us from that far-off time when paleolithic man hunted the rhinoceros and the mammoth in the forests of Europe.

Gradually primitive man began to conventionalize his pictures until they came to represent ideas rather than the actual pictures of objects. This was called the stage of the ideogram. The figure of a man could be drawn, for instance, to represent hostility, friendship, death, hate, hunger; pictures of the sun and moon could be drawn to represent day or night, to indicate a number of days travel in a certain direction, or seasons, or periods of time. Arrows flying in both directions indicated battle; arrows flying in but one direction represented the defeat and pursuit of the enemy. The American Indians developed a very remarkable system of ideographic writing and showed great ingenuity in combining these conventionalized pictures and symbols to tell the stories of their battles and to record the deeds of their braves. They carved these stories on wood or bark; they painted them on hides and rocks; they wove them into their blankets.

The Roman numerals are said to be an outgrowth of the ideograms, I, II and III representing one, two, or three fingers of the hand, V representing the open hand showing all five figures, IV representing one less than the full hand, and X representing both hands or ten fingers.[1]

The Chinese sign for *words,* a typical ideogram, represented the mouth with breath issuing from it.

Probably the best developed of these early systems of picture writing was that of the Egyptians, whose hieroglyphics—literally sacred carvings—represented the most elaborate of picture languages. Their inscriptions on temple walls, on palaces and tombs, have been the source of much of our information on Egyptian history.

In time, these picture signs began to take on sound values. Just as in the familiar schoolboy rebus the picture of an eye is made to stand for the pronoun *I,* so in these primitive languages pictures of objects came to represent not the objects shown, but rather sounds of the names applied to these objects. This development ushered in the fourth era, that of the phono-

[1] Daniel B. Updike, *Printing Types,* p. 40.

gram. At first these sound-signs represented words, but later they grew more simplified and came to stand for syllables which might be repeated over and over in various combinations to form words—the beginnings of a primitive, if somewhat cumbrous, written language. The Chinese and Japanese languages have never gone beyond this stage. Today they are made up of combinations of ideograms and phonograms. That is why so many thousands of symbols are necessary in the writing or printing of those languages.

### BIRTH OF THE ALPHABET

Long before the pyramids, the Egyptians had reduced their written language to about 400 of these syllabic phonograms. Then they discovered that, after all, the sounds of the human voice were reducible to a very few, and that all human speech, consisting, as it does, of combinations of these few sounds, could be represented by combinations of simple phonograms representing not words, or even syllables, but merely these primary sounds. The Egyptians selected some forty-five of their symbols for alphabetic use. The infrequent use of some of these symbols led to a further reduction to twenty-five. This Egyptian alphabet, known as the demotic, was in common use from 1900 B.C. to about 400 B.C., but it was not really an alphabet, for the Egyptians never used it entirely as such. All that remained was to discard the nonalphabetic elements in their language—the ideograms and syllabic phonograms—but they were never discarded. Side by side with their new "ear pictures" they used their old "eye pictures." Their written language was a medley of both. They had a nearly perfect alphabet virtually in their possession and did not know it.

The development of written language was, of course, going on independently in different parts of the world. In the valley of the Tigris and Euphrates rivers the Assyrio-Babylonian races were also making progress. These people had inherited lands of clay, and they early discovered that permanent records might be made by marking pictures and signs in lumps of clay and baking them in fire or in an oven. Gradually these lumps of clay gave way to tablets of clay, which were marked with pointed sticks, and later with pointed tools of stone, bronze, or copper. When jabbed into the clay, the instruments made a wedge-shaped

mark. In time the early attempts at picture writing gave way to a series of phonograms consisting of varied combinations of these wedge-shaped marks. This form of writing has been called cuneiform, from two Latin words meaning wedge-shaped. Archeologists have unearthed what were apparently the libraries of Babylonian kings, great earthenware jars containing clay tablets covered with cuneiform writing. One library consisted of more than 20,000 bricks, tablets, and cylinders.

From these many cuneiform records archeologists have found evidence of a civilization that antedated even the Egyptian and that boasted a crude written language as early as 6,000 years before Christ. Like the language of the Egyptians, that of the Assyrio-Babylonians developed successively through the stages of the pictogram, ideogram, and phonogram. At its highest development it reached the syllabic phonogram stage and included a cumbrous system of about 500 characters. The cuneiform language never reached the alphabetic stage, but it did perhaps furnish ideas for the real alphabet makers.

Credit for the development of the first real alphabet is generally given to the Phœnicians, a trading people of Semitic origin living on the eastern shores of the Mediterranean. When the Phœnician traders overran the Ægean, they found there an ancient hieroglyphic script of the pre-Hellenic civilization. Previously they had had contact with the hieroglyphics of the Egyptians and the cuneiform writing of the Assyrio-Babylonians. Eager for trade, they seem to have availed themselves of the written languages of all these peoples. Their contribution was the task of simplifying the existing signs and assigning to each a definite phonetic value. Like all business people, their method was brevity. They got rid of surplus signs, of the lumber of outworn pictographs and ideograms, and reduced the total to an alphabet of but twenty-two letters.[2] It was called *alphabet* from the first two letters, *aleph* and *beth,* which the Greeks later changed to *alpha* and *beta.*

This first alphabet consisted almost entirely of consonants, since they were held to be the essential part of the word. The vowels were understood. It is interesting to refer to the ancient Phœnician and see how these letters, when traced back, resolve themselves into the conventionalized picture of some object.

[2] Edward Clodd, *The Story of the Alphabet,* pp. 196, 197.

The following table will give some idea of the origin of our letters.

| Phoenician | | | Greek | | | Roman |
|---|---|---|---|---|---|---|
| Object | Name | Character | Anc. Character | Name | Classic Character | |
| Ox | Aleph | |  | Alpha | A a | A |
| House | Beth | |  | Beta | B | B |
| Door | Daleth | |  | Delta | D | D |
| Fence | Cheth | |  | Eta | H | H |
| Hand | Kagh | | | Kappa | K | K |
| Eye | Ayin | | | Omicron | O | O |

(Adapted from Clodd, *The Story of the Alphabet.*)

In the eight centuries in which the Phœnicians were commercially dominant in the Mediterranean they succeeded in imposing their alphabet on most of the civilized world.

The Greeks, however, perfected this alphabet by adding separate letters to represent the vowels and by modifying some of the Phœnician signs to make an alphabet of twenty-four letters. This Greek alphabet was introduced in Italy about 800 B. C. The Romans adopted most of the Greek letters and added *G* and *V*. The ultimate dominance of the Roman Empire made the Roman alphabet the vehicle that carried both Greek and Roman culture to the Angles, Saxons, and Celts of England and Ireland. The Anglo-Saxons took all of the Roman letters and later added *J* as an alternate for *I*, and *U* as an alternate for *V*. From the runic alphabets of the Scandinavians they borrowed the *W* sound; but to create a character for it they merely combined two *V*'s (double *U*'s) to make the *W*.[3]

### DEVELOPMENT OF WRITING MATERIALS

While this development of a written language was going on, a development of writing materials was also taking place. Primitive man had to rely on rocks, stones, cliffs, clay tablets, wood, and hides. The Chinese are said to have made tablets from bamboo at a very early date and to have manufactured a crude paper from silk, wood-fiber, or old linen long before the days

[3] *Ibid.*, pp. 213-222.

of papyrus; but, if they did, their discovery had no influence on the rest of the world, for they lived entirely to themselves.

It was a great step forward when the Egyptians brought out a crude kind of paper, known as papyrus, made from a plant by that name which grew on the banks of the Nile. The outer stem was stripped away, and the fibers of the plant laid out in a row of the width desired for the paper. A second layer was laid across the first, and the whole was then put to soak in the Nile. It came out a soggy mat, which was rubbed with stones to squeeze out the water, then dried and polished by rubbing it again with smooth stones until it made a fairly good writing surface. About twenty of these sheets were put end to end and pasted together. The whole strip was then rolled up on a stick of wood, and the papyrus roll was ready for sale. For hundreds of years papyrus rolls were used for all records and writings. The Bible is full of references to them. They were the forerunners of our modern books.

About 200 B. C. the King of Pergamus, because of trouble getting papyrus from the Egyptians, caused to be devised a new kind of writing material made from the skins of animals. The hair of the hide was removed in a strong lye solution. Then the skin was scraped and rubbed until it became soft and pliable, yet had a smooth hard writing surface. This new writing material was called "pergamentum," from the name of the city where it was first made. From it we get our word parchment for the material still used occasionally in the making of diplomas and certificates. College diplomas are often called sheepskins, because parchment is made principally from the skins of sheep.

Vellum made from the skins of calves and a variety of smaller animals in time displaced parchment. It was used for the finest books of medieval times and was the principal writing material of that period.

### THE INTRODUCTION OF PAPER

Paper does not seem to have been brought into Europe until about the ninth century, when it was introduced by the Moors, who, no doubt, had learned the art of making paper from their contact, as traders, with the Orient. But outside of Spain, where the Moors developed a high culture and established some seventy libraries, paper did not prove popular for a long time.

The rest of Europe was deep in the ignorance of the dark ages, and there was no demand for a cheap writing material. The professional copyists among the monks, who alone were keeping alive the spark of learning and who were laboriously copying the few existing manuscripts in longhand, did not feel like trusting their years of effort to anything that could be as easily destroyed as paper. They much preferred the more durable vellum, which also afforded a better writing surface. This early paper was thick, coarse, and knotty, entirely unfitted for the display of ornamental penmanship and illumination. Paper came before its time. It was not until about 400 years later, with the revival of learning and the invention of printing, that paper came into extensive use. Then it was found that paper was much more satisfactory for printing than any other material, and it soon supplanted all others.

### THE FIRST BOOKS

It was out of vellum that the first books were made. The sheets of vellum could not, of course, be easily fastened together in rolls, as had been done with papyrus. Instead, the early scribes began laying the sheets one on top of the other and folding them in the middle. Then somebody thought of stitching them up the back along this fold. The next step was to protect the outside sheets by attaching a board cover to the backs of the first and last pages. And thus the first books were brought into being.

Bookmakers of the early centuries tried to outdo each other in fashioning beautiful covers for their books. Some of these covers were rare carvings in wood or ivory; some were covered with plates of silver or gold; many were studded with gems and precious stones. One of the French kings of the period issued an edict forbidding his nobles from having more than five jewels on the covers of their books. It must be remembered that books in those days were not made to be put away, back to back, on shelves. They were precious treasures because they were so few in number and they were kept in places of honor in the monasteries and in the castles and homes of those who could afford them.

The development of books was largely the work of the monks of the Christian church in medieval times. The pagans had ad-

hered to the roll because of its associations with classic culture. The conservatism of the Jew prevented his changing the roll form of his Scriptures. But Christianity was a book religion. The Christian was constantly referring to his Scriptures for argument

COVER OF A FIFTEENTH CENTURY BOOK

Note the intricate leather work and the jewels. (From Blades, *The Pentateuch of Printing.*)

with his adversary as well as for his own edification, and he wanted to be able to find his favorite passages readily. The spread of Christianity encouraged the substitution of the book for the roll.

During the long period of the dark ages, from the fifth to the

twelfth centuries, it was left to the monks alone to preserve the spark of civilization. The common people were illiterate; the nobles were rough, unlettered soldiers; even the kings could hardly read and write. The entire world depended on the monks to keep its records and to preserve the learning of the past.

### MANUSCRIPT BOOKS

There were very few of the old classics in existence. When the barbarians swept down upon Rome, they burned the libraries. The few rolls and books that escaped destruction were scattered everywhere. The monasteries set out to collect what early manuscripts could be found, and carefully lent them to each other so that copies might be made. Every effort was made to incite to greater care and patience the poor brothers who had the laborious task of copying these works in longhand. The copying of manuscripts was made to appear especially pleasing to God. The story is told of one man who came to a monastery, heavily burdened with sin. He was set to work copying the Bible, and succeeded in winning salvation before he died because the number of letters in the Bible exceeded by one the number of his sins.[4]

The monks at first devoted themselves largely to the copying of the Bible and other religious works, but after a time they began devoting more and more attention to the copying of the best of the ancient classics. A high degree of skill was attained by these manuscript writers. Some of the monks developed a most beautiful lettering. Others, called illuminators, specialized in painting in the large colored initials and the artistically decorated headbands and borders. Many of these medieval manuscript books are works of rare beauty.

### BLOCK PRINTING

With the revival of learning, from the twelfth century on, there grew up an increasing demand for books. There came also a desire for some learning, in a rudimentary form, at least, among the great masses of common people. Strange as it may seem, the introduction of playing cards in Europe had a considerable in-

[4] Frederick W. Hamilton, *Books before Typography*, p. 31.

fluence in awakening the minds of European peoples. Even more interesting is the fact that these playing cards represent the earliest form of printing in Europe, for, in order to produce the cards in quantity, a scheme was devised whereby they were stamped from rude carvings of the spots and figures on small wood blocks. The Chinese and Japanese are said to have printed whole books by this method as early as the eighth century, but their isolation kept the art from spreading to the rest of the world. Yet, since playing cards are said to have been introduced from the Orient, it is possible that some inkling of this method of printing may have come with the cards.

By the fourteenth century, at any rate, card games were very popular in many parts of Europe, and the cards themselves were printed in great quantities. The clergy denounced cards because they led to gambling. A vast number of cards were burned in public squares, but the clergy could not stamp them out. Though cards did encourage gambling, they were, nevertheless, a means of education to the common people, stimulating their minds and helping them to exercise their reasoning faculties.[5]

### IMAGE PRINTS

To men of learning—the clergy themselves—cards pointed the way to the use of block printing for other purposes. Whether or not the clergy introduced image prints to counteract the evil influences of cards, the next development in printing was the engraving of figures of saints on wood blocks. These were then stained or inked so that paper could be placed over them and rubbed until the images were transferred to the paper. The result was a crude print of the wood engraving.

Since the common people could not read, the clergy turned to pictures as the best means of teaching them. The people were already familiar with pictures of saints and Bible characters in the stained glass windows, and the paintings, carvings, and sculptures in their churches. The block prints offered a means of reënforcing the teachings of the church in the home by placing in the hands of the common people crude but effective reproductions of many of the religious pictures with which they were familiar.

[5] Theodore Lowe De Vinne, *The Invention of Printing*, p. 106.

Religious dissensions of the time, furthermore, stimulated the demand for instruction. New sects were springing up. Translations of the Scriptures into German, French, and English were bringing together groups that gathered secretly to hear them read, for the reading of Scriptures in the mother tongue was punishable by death in many parts of Europe. In this hungering for instruction and the consolation offered by religious pictures, the image prints filled a definite need.[6]

### BLOCK BOOKS

At first only rude pictures were printed. Then brief lines of explanation were added beneath the pictures. To begin with, the prints were circulated only as single sheets, but after a time a number of them were collected and bound into book form. One of the best-known of these block books was the *Biblia Pauperum*, or *Poor Man's Bible*, printed about 1425. Like the picture books given to children today, it told in graphic form some of the highlights of Bible history, with images of apostles, prophets, and patriarchs. The first edition contained forty-two engraved pages, and the second, seventy pages. It was printed on rough paper in brown ink, and the explanations were in Latin. Eventually it went through eleven different editions.

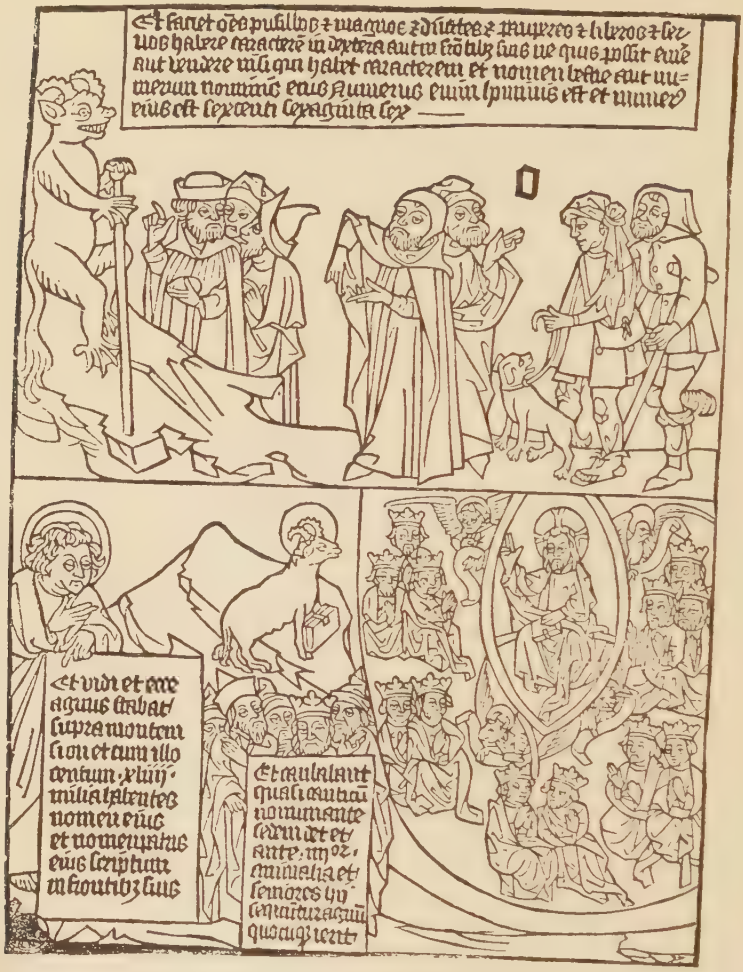
The next step was the combination of manuscript pages of text, written by copyists, with block prints of images illustrating the text. The engraving of any considerable amount of text on wood blocks was still too costly. It was cheaper to have the text copied. There were as yet not enough book buyers, nor was the skill of the engravers far enough advanced, for the world to apply its knowledge of printing with ink to the printing of whole books.

The one exception was the *Donatus*, an abridgment of a Latin grammar, which was printed entirely from blocks and it, so far as is known, was the only block book which contained no pictures. It was only a thin quarto of thirty-four pages, but it was very extensively used because Latin was the foundation of all culture in the middle ages, and this primer was needed in every preparatory school. It is said to have been printed in more than fifty editions.

[6] *Ibid.*, p. 182.

THE ST. CHRISTOPHER WOODCUT

This earliest dated wood block bears the date 1423. (From Blades, *The Pentateuch of Printing.*)



AN EARLY FORM OF THE PRINTED PAGE

A woodcut from the *Apocalypsis*, a block book. (From Oswald, *A History of Printing.*)

Block books were very popular from 1440 to 1470. Most of them were religious works, and many were printed in successive editions and had a large circulation. Their literary merit, however, was small. They were miserable looking little pamphlets printed on dingy paper and in muddy ink. They were rated as literary rubbish by the educated, who much preferred their beau-

tiful, illuminated manuscript books and who gave no encouragement to the vulgar business of printing from blocks.

### THE INVENTION OF PRINTING

By the fifteenth century, however, the Renaissance in Europe had created a demand for books with which manuscript writers could not keep pace, and men set about to find some quicker way of duplicating books.

Fifteen European cities lay claim to being the birthplace of typography—the printing from movable types. It is probable that the invention did not spring into being full-blown, but was the result of patient experimentation on the part of several men working separately in different parts of Europe, all having received their inspiration for the invention from block printing. It is possible that printing from movable types made its appearance in different cities almost at the same time.

The earliest evidences of printing from movable types are found in the Dutch incunabula, or "cradle books," comprising about forty-seven pieces of printing, some of which are nearly complete, others mere fragments of pages. Nearly all of these pieces have been found in or near Haarlem, Holland. They are evidently the work of a block printer who had taken the first step of printing the explanations to his pictures from movable types instead of from engraved blocks. The block illustrations are well printed; the typographic work is very crude. The letters vary in size and are not in perfect alignment. Apparently each letter had been cut independently on the end of the type body, and the cutter was not sufficiently skilled to center his letters perfectly. Some of the earlier fragments appear to have been printed from wooden types; some of the later ones may have been printed from metal types. There are also evidences of experimentation in ink and presswork.

Who this early Dutch printer was, is not known; there may have been several. Some authorities attribute the invention to Laurens Coster of Haarlem, who, it is said, first printed from movable types in 1446. Others discredit this claim as mere legend. But whether or not it was Coster, the Dutch invention, though probably first, had apparently no influence outside of Holland. It appears to have died with the man who invented it.

It was not from Haarlem that printing art spread to the rest of the world.

### THE FOUNDER OF MODERN PRINTING

The honor belongs to the city of Mainz in Germany, where John Gutenberg reinvented the art and so perfected it that it became almost a new invention. It may be that some pieces of the earlier Dutch printing found their way to Mainz to give Gutenberg the idea. There is some evidence, however, that Gutenberg may have begun his experiments independently at Strasbourg. At any rate, he worked out a new and superior process. His greatest contribution is the invention of an adjustable brass type mold with which movable types could be cast accurately and in large quantities. Printing was limited in its possibilities as long as single types had to be painstakingly cut on individual wood or metal blocks. It was the type mold which made printing practical and gave wings to the printing art. Gutenberg may not have been the inventor of typography, but he was the founder of modern printing.

Strange to say, there is no book or other piece of printing which bears Gutenberg's name. All that we know of him has been gleaned from public records. He began printing at Mainz about 1448, after some ten years of patient experimentation. In order to get money to develop his invention he entered into a partnership with John Fust, or Faust, a shrewd goldsmith. Fust was to advance the money and receive half the profits, and was to have a mortgage on all of Gutenberg's equipment until the debt was paid.

It took Gutenberg longer than he had expected to perfect his printing process. His original types were cut separately from small blocks of wood. That is probably one reason why his work took so much time and cost so much money. He cut the letter in relief on one end and bored a hole through the other. The letters were then arranged in lines on strings until they formed a page; then he bound them together with wire to keep them from falling apart. His next step was the invention of a frame, with wedges to keep the type in place. Then he constructed a rude press, adapting the familiar wine press to printing purposes. But wood types were unsatisfactory; the ink softened the wood, and the press wore down the letters. He tried cutting types

from lead, but this metal proved too soft. Harder metals cut through the paper. Eventually he found the right combination, an alloy of lead, tin, and antimony, which is used to this day. Then followed the invention of his brass type mold, which made

SUPPOSED PORTRAIT OF JOHN GUTENBERG

From an old print in the National Library in Paris. (From Lacroix.)

it possible to cast his letters in quantities instead of having to cut them out by hand.

Ink proved another difficulty. The ink used by the copyists, and the pale distempers used by the block printers were both unsuitable, for they ran and blotted. Finally Gutenberg hit upon a simple combination of lampblack and oil, which is to this day

the basic constituent of black printing ink. All of these preliminary steps were necessary to the perfection of the new process. Without types, inks, forms, and press, printing could not have been possible.

It was not until about 1450 that Gutenberg began work on his famous 42-Line Bible. It was a monumental work of 1,300 pages, each of forty-two lines—hence the name. Only a few pages could be struck off each day. Fust seems to have been fairly patient, though the work dragged on for years; but in 1455 he tired of his bargain and, having received neither profits nor interest, brought suit for the recovery of his money. He won his suit and foreclosed his mortgage, taking almost everything that Gutenberg owned.

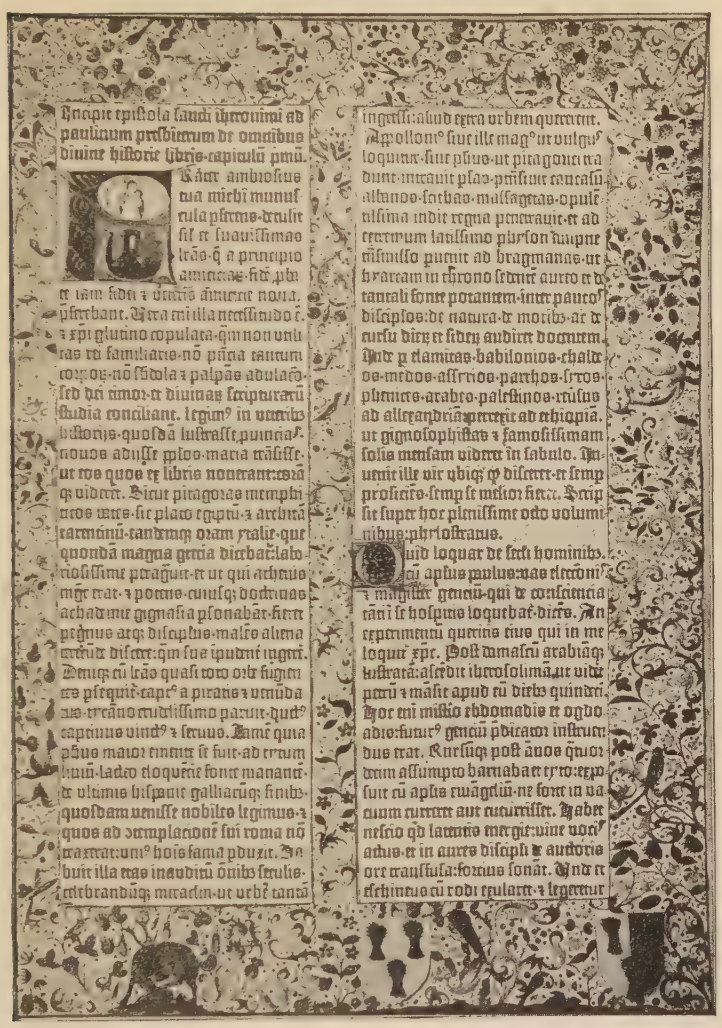
### FUST AND SCHOEFFER

There does not seem to be any reason, however, to believe that Fust was an unscrupulous schemer who deliberately did Gutenberg out of the fruits of his invention. Gutenberg, like many another inventor, was an impractical dreamer. He always seems to have been in financial difficulties; in fact, most that we know of him is gleaned from court records. This record of financial slipperiness may have prompted Fust's suit. Fust was a practical business man who was willing to back an invention which seemed to him to have great possibilities, but he never had the slightest intention of letting an impractical inventor waste his money beyond his power to recover it.[7] When seven years had elapsed without producing anything, he felt justified in dissolving the partnership and putting a more practical man in charge of the business.

Fust associated with himself one of Gutenberg's workmen, Peter Schoeffer, who was a skilled craftsman with a head for business. Together they completed and brought out the 42-Line Bible in 1456. Only thirty-one of these Bibles are known to be in existence, ten on parchment and twenty-one on paper. An American collector recently paid $106,000 for one original copy.

Schoeffer's skill, backed by Fust's business ability, put the new invention on a practical basis and assured its future. Schoeffer made many improvements in the printing of books, and he

[7] Frederick W. Hamilton, *The Invention of Typography*, p. 44.



FIRST PAGE OF THE 42-LINE BIBLE, GUTENBERG'S TYPOGRAPHIC MASTERPIECE

(From Oswald, *A History of Printing.*)

and Fust brought out 115 works. One of them, a psalter printed in 1457, is almost as famous as the 42-Line Bible. It is marked by very large and profusely ornamented initials in red and blue. Fust and Schoeffer made printing a financial success. They established agencies for the sale of their books in other cities and sold not only their own but also the books of other printers.

Gutenberg, meanwhile, had not given up. Though nearly sixty years old, he set out again, secured the backing of Conrad Humery, an advocate and town clerk of Mainz, and established a rival shop. To Gutenberg's new press are attributed some fifty books and pamphlets, the most important of which are the 36-Line Bible and *The Catholican*, a theological grammar and dictionary of nearly 800 pages, written by Joannes Balbus in the thirteenth century.

Since Fust, Schoeffer, and Gutenberg could not patent their invention, they made their new art of printing a secret process. They guarded their operations with care and compelled those who came to learn the trade to take an oath of secrecy. This condition lasted until 1462, when Adolphus of Nassau, a militant prince-bishop and one of the contenders for the honor of succeeding to the Archbishopric of Mainz, laid siege to the city and sacked it. He expelled all male inhabitants capable of bearing arms. This, of course, put a stop to the printing industry in Mainz and scattered the workmen. No printing was done there for three years, but by 1465 Schoeffer had begun printing again and published an edition of one of Cicero's works; and in the same year, some authorities declare, Gutenberg set up a shop in Eltville, a little village near Mainz. But Gutenberg's work must have ended shortly thereafter, for he was appointed an officer of the court of Adolphus of Nassau for "agreeable and voluntary service rendered Adolphus and his bishopric." It is believed that the prince-bishop took this means of honoring the founder of modern printing. Gutenberg's printing office passed into the hands of relatives by marriage, Henry and Nicholas Bechtermuntz, who did some notable printing with the types inherited from Gutenberg. In 1468 Gutenberg died unattended by any of his family and still weighed down with debts.

Fust had passed away two years earlier while in Paris selling the publications of his press. Peter Schoeffer continued the business under his own name and became an outstanding figure in

FIVE EARLY PRINTERS AS DEPICTED IN AN OLD PRINT

I. Gutenberg. II. Fust. III. Coster. IV. Manutius. V. Frobenius. (From Blades, *The Pentateuch of Printing.*)

the history of printing. He introduced printing in colors, spacing with leads between lines, and the use of marginal notes. He also perfected the process of type founding to such a degree that he is spoken of as the "father of type founding." He continued to print until the close of the fifteenth century, and some fifty-nine books are credited to him as an independent printer. His publishing business grew to large proportions, and in his later years while continuing his printing shop at Mainz he moved his publishing headquarters to Frankfort, from which city he extended his business throughout Europe.[8]

### THE SPREAD OF THE PRINTING ART

The German printers, scattered by the sack of Mainz, took their new art with them. Presses were soon established by the fugitive printers in Cologne, Augsberg, Nuremberg, and Strasbourg. In Cologne, especially, typography took deep root and flourished. There Ulrich Zell, who had learned the art from Peter Schoeffer, established a press and became a prolific publisher of books.[9] At Nuremberg the Kobergers built up the largest printing and publishing business of their time. In 1500 they had twenty-four presses going full tilt and had sales agents in France, Netherlands, Italy, Austria Hungary, Poland, Germany, and England. In 1517 Martin Luther nailed his famous theses on the church door at Wittenberg, and the Kobergers, being in the center of the controversy that followed, benefited by the flood of religious writings that demanded to be printed.[10]

By the year 1500 there were printing presses in most of the principal cities of Europe. There were thirty-eight printing establishments in Rome, thirty-eight in Cologne, and thirty in Paris.

The activity of these early printers is remarkable. By the close of the fifteenth century nearly every book of value had been found and printed two or three times. During this period there were published 291 editions of Cicero, 95 of Virgil, 57 of Horace, and 91 of the Latin Bible. Before 1500 Venice had produced 2,835 books, Rome 925, Paris 751, Strasbourg 526, Cologne

[8] John Clyde Oswald, *A History of Printing*, p. 32.
[9] William Blades, *A Pentateuch of Printing*, p. 26.
[10] Frederick W. Hamilton, *History of Printing*, p. 35.

530, and London 130.[11] Most of these books averaged 300 copies per edition. The chief interest of the early printers was the reproduction of the Bible, books of religion, and the classics, and most of these works were printed in Latin. Before many years, however, there came an eagerness for books in the native languages of each country, books that plain people could read, books that represented the life and thoughts of the living and not those of the dead. The world was getting ready for a new literature, for Luther, Bacon, Galileo, and Shakespeare.[12]

### PRINTING REACHES ITALY

Among the first of the German printers to cross the Alps into Italy were Arnold Pannartz and Conrad Sweynheym, who had worked under Fust and Schoeffer in Mainz. They came to the monastery at Subiaco, near Rome, where a number of German monks had settled, and here they set up a printing establishment in 1464. Their first production was a *Donatus,* or Latin grammar. Two other books followed, both beautifully printed. Then they moved their plant to Rome, where they produced some fifty-two works in the next ten years. Their first printing at Subiaco was done with the types they had brought with them from Germany, but the Italian people did not take kindly to this angular, black, pointed, Gothic lettering which was a frank imitation of the handwriting of the German manuscript writers of the period. They were accustomed to a more simple, graceful lettering that had been brought into favor by the Renaissance and the revival of the humanistic handwriting in which many of the classics had been copied. When Pannartz and Sweynheym moved to Rome, they therefore designed new types more closely modeled after the handwriting of the Italian scribes. They have been credited with being the originators of the first Roman type faces, but their types were not a true Roman; they were still semi-Gothic in character.

Venice grew to be the largest printing center in Italy, with 100 printing offices and 268 registered printers before the end of the fifteenth century. There John and Wendelyn de Spira did some notable printing and helped pave the way for the inven-

[11] De Vinne, *op. cit.,* p. 493.
[12] *Ibid.,* p. 513.

tion of the true classical Roman type face by designing a face Roman in character, resembling somewhat our modern Oldstyle Antique.

### NICOLAS JENSON

The honor of originating the first true Roman types, however, is given to Nicolas Jenson, a Frenchman who began printing in Venice about 1470. He set out to create a type face that would match the fine Roman letter of the Italian scribes, and succeeded in producing a face so far superior to those of Pannartz, Sweynheym, or the De Spiras that he has come down through the years credited with the perfection, if not the invention, of the true classical Roman type face.

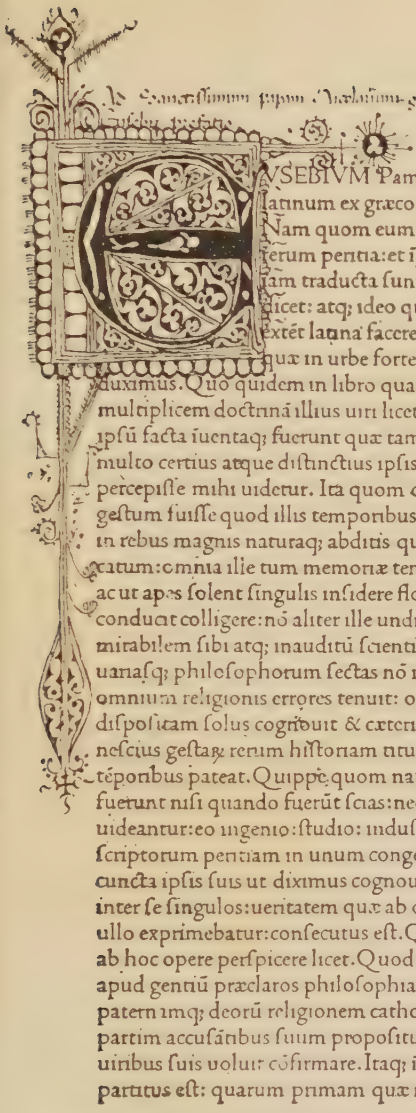
Jenson had been an engraver and the master of the French mint at Tours. His king, Charles VII, sent him to Mainz to learn the new printing art. He enrolled in Gutenberg's shop, took the oath of secrecy, and learned the art well. Three years later he returned to France, only to find his king dead and a new sovereign on the throne who was not interested in printing. Nine years elapsed before he set up shop in Venice. He printed there until his death in 1481 and produced 155 editions of different books, all of them representative of the finest of printing art. So successful was he that he won both wealth and honor. Pope Sixtus IV conferred upon him the title of Count Palatine. He was thus the first printer to become a member of the nobility.[13]

Jenson's Roman types have been the model for Roman letters ever since. In recent years there has been a marked revival of Jenson's type. The American Type Founders in 1914 brought out Cloister Oldstyle, a faithful copy of the type employed by Jenson, and it is today one of the most popular type faces in use. Its companion Cloister Bold is one of the best newspaper headline faces.

### THE INVENTION OF ITALIC TYPE

Another famous Italian printer was Aldus Manutius, who also printed at Venice but a little later than Jenson. Aldus was a scholar and teacher, and realizing the need of books among

[13] Oswald, *op. cit.*, p. 112.



Ad Sanctissimum papam Nicolaum georgii trapezuntii in traductione Eusebii prefatio

CVSEBIVM Pamphili de euangelica præparatione latinum ex græco beatissime pater iussu tuo effeci. Nam quom eum uirum tum eloquētia: tū multarū rerum peritia: et īgenii mirabili flumine ex his quæ iam traducta sunt præstātissimum sanctitas tua iudicet: atq; ideo quæcūq; apud græcos ipsius opera extēt latina facere īstituerit: euangelicā præpationē quæ in urbe forte reperta est: primum aggressi traduximus. Quo quidem in libro quasi quodam in speculo uariam atq; multiplicem doctrinā illius uiri licet admirari. Cuncta enim quæ ante ipsū facta īuentaq; fuerunt quæ tamen græce scripta tūc inuenirētur: multo certius atque distinctius ipsis etiam auctoribus qui scripserunt percepisse mihi uidetur. Ita quom constet nihil fere præclarum unq̄ gestum fuisse quod illis temporibus græce scriptum non extaret: nihil in rebus magnis naturaq; abditis quod a philosophis non esset explicatum: omnia ille tum memoriæ tenacitate: tū mētis ꝑcepit acumine: ac ut apes solent singulis insidere floribus: indeq; quod ad rem suam conducit colligere: nō aliter ille undiq; certiora uerisimilioraue deligēs mirabilem sibi atq; inauditū scientiæ cumulum confecit: multiplices uariasq; philosophorum sectas nō ignorauit: infinitos pene gentium omnium religionis errores tenuit: orbis terrarum historiam serie sua dispositam solus cognouit & cæteris tradidit. Nam quom non esset nescius gestarū rerum historiam titubare sāctissime pater nisi distincta tēporibus pateat. Quippe quom natura tēporis faciat ut quæ ī tēpore fuerunt nisi quando fuerūt scias: nec fuisse qdem ꝓpter confusionem uideantur: eo ingenio: studio: industria huic incubuit rei: ut omnium scriptorum peritiam in unum congestam facile supauerit: distīctiusq; cuncta ipsis suis ut diximus cognouerit auctoribus. Conferendo enim inter se singulos: ueritatem quæ ab omnibus simul emergebat: nec ab ullo exprimebatur: consecutus est. Quæ omnia ab aliis quæ scripsit & ab hoc opere perspicere licet. Quod ille ideo suscepit: quoniam quom apud gentiū præclaros philosophia uiros nobilissimus esset: ac priscā paternamq; deorū religionem catholicæ ueritatis amore cōtempserit: partim accusātibus suum propositum respondere: partim nostra pro uiribus suis uoluit cōfirmare. Itaq; ī duas uniuersum partis negotium partitus est: quarum primam quæ nunc traducta nobis est: qua illis

IRST PAGE OF WHAT IS THOUGHT TO BE THE FIRST BOOK PRINTED BY NICOLAS JENSON

ote the classic type face and the clear impression. (From Oswald, *A History of Printing.*)

the common people he devoted his life to the printing of books at prices within the reach of slender purses.[14] In 1501 he printed an edition of Virgil in a new type said to have been modeled after the handwriting of Petrarch—a graceful, condensed, and slanting letter—which has since borne the name *Italic*, after Italy, the country in which it was originated. The new letters fitted together more closely in the line than other types and thus permitted more words to the page. This enabled Aldus to reduce the size of his books as well as their price. In the next few years he published in pocket editions some 120 works which gave the world the best of Greek and Roman classics and the best of the more recent literature of his time.

Aldus was remarkable in that he not only managed a great printing house, superintending all the details from the composition of the types to the binding and selling of the books, but also designed his own type faces, made his own translations of the Greek and Latin works he printed, prepared all the copy, and read all the proofs. He probably did more toward the spread of learning and the development of literature than any other man of his time; in addition, some of his works are considered today as the finest specimens of Italian printing of the fifteenth century.

So rapid was the growth of the printing art in Italy that by the end of the century seventy-three towns and cities possessed presses.[15]

### THE SPREAD OF PRINTING IN FRANCE

While these developments were taking place in Italy, the printing art was also going forward in France. The first press was set up in Paris in 1471 when Guillaume Fichet, librarian of the University of Sorbonne, invited three German printers, of whom Michael Friberger became the most famous, to establish a press at the university. The art spread rapidly in France, and by the year 1500 there were sixty-nine master printers in Paris alone. Some of the Parisian printing offices had as many as five presses and fifty employees. Lyons was also an important center and boasted forty printing offices in 1500.[16]

[14] Hamilton, *History of Printing*, p. 31.
[15] Oswald, *op. cit.*, p. 81.
[16] De Vinne, *op. cit.*, p. 506.

One of the most prominent of the early French printers was Geofroy Tory, a professor of philosophy at the College of Burgundy and a scholar and lover of the arts, who did much to develop decoration and ornament in typography. He was a leader in the movement to emancipate printing from manuscript imitation. German and Italian printers up to this time had merely fashioned their types in imitation of the handwriting of the manuscript writers. It must be remembered that the first printers did not look on their art as an independent one; it was merely an art supplementing and expanding the work of the scribes. Some early printers, it is said, even tried to counterfeit the work of the scribes in order to command as good prices for their books as did the manuscript writers. Even after the craft became better established it took years before types began to assume an individuality of their own. Geofroy Tory broke away from established designs and produced new type faces and ornaments of unusual beauty.

### CLAUDE GARAMOND

Tory's pupil, Claude Garamond, won even greater fame than his master, for in 1524 he brought out a new style of Roman type with a greater differentiation of line than Jenson's, a more marked difference in shading between thick and thin strokes, shorter serifs, and a grace and beauty of form that soon made it the most popular type of its day. Garamond in time came to devote all his time to designing and casting types for other printers. He is said to have been the first to set up a type foundry independent of a printing plant. He took the Roman and Italic letters of his predecessors and added grace and elegance to them. His types soon were used by printers all over the continent. He was probably more influential than any other man in bringing about the general adoption of the Roman in place of the Gothic type faces. In recent years the Garamond type face, too, has been revived. It is one of the best advertising faces available today.

Of all its famous printers there is none whom France honors more than the family of Estienne which printed in Paris and Geneva from 1502 to 1664.[17] Three generations of fathers and

[17] Blades, *op. cit.*, p. 70.

sons carried on for 162 years probably the most remarkable printing business in the world, for they were not only printers, but scholars and authors as well, and did a great deal to raise the literary standards of France and to make French the polished and beautiful speech it is today. They produced a long list of works in Greek, Latin, Hebrew, French, and Italian. Printed with Garamond types, they are books of rare beauty.

### THE DIDOT FAMILY

In modern times the typographic fame of France was carried forward by the Didot family which printed from 1713 to 1876. The Didots were students and improvers of printing. In addition to presswork and typography they gave their attention to the improvement of type-founding and paper-making. In 1755 they adopted and made practical a point system of measuring type, which is identical in principle with the system of type measurement used in France today.

The Didots also invented a device for casting types in considerable number. Firman Didot invented a process of stereotyping which he used extensively in his own printing. He was famous not only as a printer, but also as a teacher of printers. His office was a center of printing education to which printers came from far and wide.[18] The long list of works published by the Didots would make a complete library of standard Greek, Latin, and French authors. The House of Didot distinguished itself by its very beautiful editions of classics in many languages.

### EARLY SPANISH PRINTERS

The history of Spanish printing is of particular interest to American newspaper men because it was a Spaniard who first introduced printing into North America.

Fifteen German printers found their way into the Spanish peninsula during the latter part of the fifteenth century. They taught the art to Spaniards, so that by 1500 there were sixty presses set up in different Spanish cities. The first printer is believed to have been John Gherling, who established a press at Barcelona.[19]

[18] Hamilton, *History of Printing*, p. 49.
[19] Oswald, *op. cit.*, p. 163.

The most famous of Spanish printers were the Crombergers, father and son, who printed 239 works during the first half of the sixteenth century. It was the son, Juan Cromberger, who, in order to print missionary tracts in the language of Mexican natives, sent a printing outfit to Mexico City under the management of Juan Pablos, a printer of Seville, and thus introduced the printing art to the New World.[20]

Spanish printing is interesting in that it was the first to take on a distinctly national character. Decorative borders, initials, illustrations, and type arrangements all had a very definitely Spanish character.

### LOW COUNTRY PRINTERS

The student of typography would be missing an important page in his historical background if mention were not made of Colard Mansion, Christopher Plantin, and the House of Elziver, names famous among early Dutch printers.

Though printing from movable types is believed to have had its birth in Holland, it was not until after Gutenberg's death that the printing industry had its real beginning in the Low Countries. Katelaer and Leimpt, who began printing in Utrecht in 1473, are the first Dutch printers to place their names in a printed book of their own production.[21]

Colard Mansion, who began to print at Bruges in 1475, was the man who taught William Caxton the printing art and enabled him to introduce it into England. Mansion printed at Bruges until 1484.

Christopher Plantin, best known of the Low Country printers, was a Frenchman who began printing in Antwerp in 1555 and built up the greatest printing office of his time. By 1570 it was one of the show places of Europe and had twenty-two presses working continuously.[22] Plantin himself was not a great scholar and editor, as were so many of his contemporaries, but he was a good printer and a great publisher. His office became the center of the production of Catholic literature. He printed a large number of books, many of them very beautiful and artistic, illustrated with copper plates of designs drawn by famous artists.

[20] Douglas McMurtrie, *The Golden Book,* p. 225.
[21] Oswald, *op. cit.,* p. 177.
[22] McMurtrie, *op. cit.,* p. 190.

His most important work was the Polyglot Bible produced in eight large volumes between 1569 and 1573. It gave the text of the Bible in Hebrew, Latin, Greek, and Chaldaic in parallel columns.[23] After Plantin's death in 1589 the business continued in the hands of his descendants until 1869, when the city of Antwerp purchased the plant, restored it as accurately as possible to the state it was in Plantin's day, and made it a museum of printing art and history which is the mecca of thousands every year.

Another distinguished family of printers that flourished in Holland was the House of Elziver. The founder was Louis Elziver, who began printing in Leydon about 1583.[24] In the next hundred years the house of Elziver produced more than 1,600 works in Hebrew, Greek, Latin, French, and Italian, most of them of high quality. The Elzivers made a specialty of fine editions of small size, printed in clear type on thin paper of good quality—handy little volumes that were inexpensive and yet legible and well printed.[25] They were the first publishers to issue on a considerable scale, in addition to the usual religious books and classics, books in series corresponding with those issued by publishers of today. Notable among these series were the small history books known as *The Republics*, each of the volumes devoted to a different country. They brought forth the most comprehensive collection of important literature that had been produced since the invention of printing. Their work, moreover, represented the highest development in the art of typography.[26] There is a type now in use called Elziver, but it does not seem anything like the types used by the Elzivers who modeled theirs after Garamond's.

### PRINTING IN ENGLAND

England was slow to take up printing. Probably it was because England in the fifteenth century was largely an agricultural and grazing country. Large cities, which were the centers of learning on the Continent, were fewer in the British Isles, and the English

[23] Hamilton, *History of Printing*, pp. 45-46.
[24] Oswald, *op. cit.*, p. 185.
[25] Hamilton, *History of Printing*, pp. 46-47.
[26] Oswald, *op. cit.*, pp. 188-189.

people, moreover, were isolated by water from the rest of Europe. At any rate, twenty-five years elapsed after the invention of printing before any was done in England.

Printing was introduced into England by William Caxton, a wealthy and successful merchant who, in his trading in Germany and Holland, had become acquainted with the printing art. While in Bruges managing a great trading company of which he was governor, he found time to undertake the translation into English of Le Fevre's *Recueil des Histoires de Troies.* In 1469 he gave up his office with the trading company and entered the service of the Duchess of Burgundy as secretary and financial adviser. There seems to have been little for him to do, and it is believed that he took this position in order to be able to devote himself more fully to literary work. Encouraged by the Duchess, he completed his translation. Then he enlisted as an associate a young printer, Colard Mansion, and the two set up a printing shop. Their first book was Caxton's translation of the *Histories of Troy,* which appeared about 1475. It marks a milestone in Anglo-Saxon history, for it was the first book ever to be printed in English. Then followed, among others, the first book ever to be printed in French. It is a curious fact that the first book to be printed in French was produced by an Englishman in Flanders.

In 1476 Caxton moved his printing press to England and set it up within the precincts of Westminster Abbey, then just outside of London. Caxton made a success of his printing business and produced some 101 books, many of which ran as high as fifteen editions. Unlike the continental printers who had devoted themselves largely to religious or classical works in Latin or Greek, Caxton tried to put before the English people the best of good recent literature in the English language. He began with small pamphlets and short pieces of poetry by Lydgate and Chaucer. Soon followed historical, poetical, and some religious works. His most imposing work was *The Golden Legend,* narrating the lives of the Saints of the English calendar. Caxton was active in printing and publishing until his death in 1491.[27]

Caxton was not a fine printer, for he did not care as much about the appearance of his books as about their content. His printing was probably below continental standards, but he must

[27] Blades, *op. cit.,* p. 38.

be ranked with the great names of English literature because of his great contribution to the advancement of English culture. He himself translated more than a score of the books he printed. He also did a great service for the English language, which was in a fluid state at the time, by crystallizing and establishing the forms of English speech.[28]

Printing did not reach Scotland until 1504 when Andrew Miller began to print ballads at Edinburgh. Ireland did not receive printing until 1551 when Humphrey Powell printed a prayer book at Dublin.[29]

Many printers followed Caxton's lead in England. Wynken de Worde, his foreman, and Richard Pynson were his immediate successors. But though they printed many works, they did not maintain Caxton's standards of literary taste, or even of his craftsmanship. Wynken de Worde published the first music to be printed in England.

Outstanding among English printers of the sixteenth century was John Day, who printed from 1546 to 1584 and published a number of religious works, some of the first English plays, and other works of general literature. Day produced some of the best printing that had yet been done in England. His standards, however, were not long maintained, for the civil wars of the seventeenth century and the burdensome restrictions placed upon printers by the government caused a rapid deterioration. This period has been called the "dark age of printing" in England.

### WILLIAM CASLON

Early in the eighteenth century English printing took a forward step with the entrance of William Caslon into the field of type-founding.[30] Caslon was carrying on a little business in London as an engraver of gunlocks and letter stamps, when two London printers were taken with his style of lettering and persuaded him to become a letter designer and type founder. Previously almost all English printers had imported their type from Holland. The Dutch types were good, legible, Roman faces, but a bit monotonous. Caslon's style of lettering, while embodying

[28] McMurtrie, *op. cit.*, p. 151.
[29] Blades, *op. cit.*, p. 40.
[30] Frederick W. Hamilton, *History of Printing in England*, p. 57.

PORTRAIT SUPPOSED TO BE THAT OF WILLIAM CAXTON
(From Lewis.)

all the good features of legibility in the Dutch faces, had more vigor and style. His letters were more interesting and attractive and they had, furthermore, a feeling that was thoroughly English. London printers raised £500 to help Caslon establish a type foundry, and in 1722 he brought out the type face that is now known as Caslon Oldstyle, a very legible, well proportioned face which combined beauty and grace with a certain air of distinction and dignity. His types were immediately successful and were soon in use all over Europe.

The influence of Caslon upon English and American printing and type-cutting has been very great.[31] The Caslon type face is considered by many authorities the best type for all purposes that has ever been designed. It can be used equally well throughout a newspaper for headings or want ads, display advertising or text. It is also one of the best book types available. Despite the many fine new faces available today, Caslon is still one of the most popular.

### ENGLAND'S IDEALIST PRINTER

The most eminent English printer during the eighteenth century was John Baskerville, who practiced his art at Cambridge from 1757 to 1775. He did not begin printing until he was fifty and then took it up more as a hobby than a business. By the middle of the eighteenth century Caslon's influence had begun to wane in England, and his types were little used. Baskerville, dissatisfied with the poor printing of the time, determined to print a few books just as well as they could be printed.

He started at the beginning and designed his types, using great care to make every letter perfect. They proved a real departure in type design. Down strokes were made quite thick, while cross strokes were very thin. The serifs were sharp and pointed instead of rounded as in the oldstyle type faces. The Baskerville types were the first modern faces.

Then Baskerville proceeded to build a new press made with greater precision than those heretofore used. The paper available on the market did not suit him, so he had manufactured the first "wove" paper, which has since come into general use. Printers' inks of the day were also unsatisfactory, so he made a

[31] *Ibid.*, p. 58.

new and better ink. Not content with that, he originated the idea of hot-pressing the newly printed sheets between hot copper plates to give the printed pages a burnished appearance.

It took seven years of experimentation before he was ready to issue his first book, but when his Virgil appeared it was the finest piece of printing that had thus far been produced in England, and Baskerville became a famous printer over night. He produced in all sixty-seven books, all of them of the finest quality. Baskerville's books, in contrast to the rich ornamentation that was in vogue, were very simple and plain. He used scarcely any ornament, relying on well-cast type, perfectly set and spaced and rightly placed upon the page to produce printing of rare beauty. His chief work, a folio Bible, has been called one of the most beautifully printed books in the world.

### BODONI AND THE MODERN TYPE FACE

The year of Baskerville's death, 1775, saw the entry of a new influence into typography in the appearance of the true modern type face designed by Giambattista (John the Baptist) Bodoni of Parma, Italy.

Since the middle of the century there had been a drift away from the oldstyle faces in keeping with the popular taste of the time in design and architecture. The oldstyle faces had had their origin in an imitation of the hand lettering of the manuscript writers. The new design was an undisguised imitation of the technique of the steel engravers—sharp, clean cut, and precise. Baskerville had pointed the way with his types. French type designers, notably Philip Grandjean, had produced other types still more modern in tendency, featured by great neatness in cutting, exact alignment, and the modern sharp, flat serif; but it remained for Bodoni to gather the loose strands together and weave them into a consistent, finished type face. Bodoni may not have been the inventor of the modern type face, but he so perfected and popularized it that he is usually credited with its invention.[32]

Bodoni learned the printing craft in his father's shop at Saluzzo, Italy. At eighteen he left home and entered the large printing plant of the Catholic church at Rome, where he became an

[32] *Ibid.*, p. 21.

expert type designer. After four years he established a press of his own and did such beautiful printing that he attracted the attention of Ferdinand I, the Duke of Parma, who invited him to become the director of the ducal press in his city. Bodoni was liberally pensioned in order that he might devote his whole thought to the making of beautiful books.

Bodoni became known as the "King of Printers and the Printer to Kings," for he enjoyed not only the patronage of the Duke of Parma, but also that of the Pope, the King of Spain, the King of Sicily, and finally that of Napoleon, who, upon conquering Italy, subsidized Bodoni to execute notable works of printing for him.

While Bodoni's earlier printing was quite decorative, his later work was, like Baskerville's, quite simple and plain with very little ornamentation. He was the first continental printer to make use of white space. His effective use of wide margins and liberal spacing between lines made his work distinctive. His principal contribution to typography, however, is the type face that bears his name. It is characterized by its thin, hair-line serifs and its marked contrasts between thick and thin strokes. It is a rather formal and precise face, and yet it has a sparkle and an elegance and charm which make it very popular for certain kinds of printing and advertising work today.

### AMERICAN BEGINNINGS

America's first printer, as has been explained earlier in this chapter, was a Spaniard, Juan Pablos, who had been sent to Mexico City in 1539 by the Crombergers to print missionary tracts in the language of the natives. Some authorities claim that there is evidence of an earlier printer who is said to have produced a volume entitled *Escala Spiritual* in Mexico as early as 1535, but no copy of this book has been found.

The first productions of Pablos' press were *cartillas*, or primers, for the education of youth, but in the next twenty years there came many fine books, mostly of a religious character. Little is known about Pablos except the works that he has left, but he is entitled to rank among the great pioneers in the development of civilization in America.[33]

[33] McMurtrie, *op. cit.*, p. 239.

The next country in the New World to receive printing was Peru, where an Italian, Antonio Ricardo, set up a press at Lima in 1584.

It was not until more than fifty years later, however, that any printing was done in the British colonies of North America. The Rev. Jose Glover, a wealthy English clergyman, was instrumental in bringing the first press to the colonies. Because of nonconformity with the Church of England he had been suspended and had gone to New England where he decided to make his home. He became interested in the founding of Harvard Academy and returned to England to raise funds. While there he decided that a printing press would be an important aid to the religious and educational work of the school, and he bought press and types with his own money and contracted with Stephen Daye and the latter's two sons to go back with him as printers.

Glover died on the trip over, but his widow came to America with the press and the printers that her husband had engaged and in 1638 set up a printing establishment at Boston. Stephen Daye is usually credited with being the first American printer, but though he acted as manager and assisted with the presswork it appears that his son Mathew was the practical printer and did most of the actual work. Their first production was a poem, "The Freeman's Oath," printed on a small half sheet of paper and brought out in 1639. In the same year came an almanac, and in 1640 their most pretentious work, *The Bay Psalm Book*, the first book to be printed in what is now the United States. Mrs. Glover married the Rev. Samuel Dunster, president of Harvard, and so the first press came into the possession of the college and continued its printing under the management of Dunster. Mathew Daye produced a number of books and was actively engaged in printing until his death in 1649.

He was succeeded by Samuel Greene, who published a number of notable books, among them the first Bible to be printed in America, John Elliott's translation into the language of the New England Indians. For many years this was the only press in the colonies. It was not until 1676 that a second press was set up at Boston by John Foster under license from Harvard. This soon came under the control of Bartholomew Greene, a son of Samuel, who is worth remembering by students of journalism as the printer of the first newspaper in America, the *Boston*

*News Letter,* published by John Campbell, postmaster of Boston. After Campbell's retirement Greene was editor of the paper for many years.

Virginia was the second colony to have a press. William Nuthead began printing at Jamestown in 1682, but the authorities were not friendly to the idea of a press, and before he was well started his press was forbidden by the governor of the colony.

Three years later, in 1685, William Bradford established at Philadelphia the first successful press outside of Boston. After printing there for six years Bradford got into trouble with the Quaker authorities and, as a result of what he felt was unjust treatment, accepted an invitation from the governor of New York in 1690 to become official printer of that colony. In 1725 he started the first New York newspaper, the *New York Gazette.*[34]

Nuthead, after being excluded from Virginia, brought his press to St. Mary's City, Maryland, and gave this colony its first press in 1686. Twenty years elapsed before the next colony, Connecticut, received a press when Thomas Short started printing at New London in 1709.[35] The earliest printing in South Carolina was done by Eleazer Phillips, Jr., at Charleston in 1731.

The printing industry did not expand rapidly in the colonies. The early printing pioneers were too busy hewing a new dominion out of the wilderness. Settlements were few and far between, and communication was very slow. It was a costly and hazardous undertaking to establish a printing plant or newspaper, for paper and ink were scarce and expensive, while both types and presses had to be imported from England.[36] A few printing centers sufficed for all the colonies. Boston, New York, and Philadelphia in the north, and Charleston and Atlanta in the south did most of the printing until the Revolutionary War.[37]

### THE SPREAD OF PRINTING IN AMERICA

The political agitation that preceded the Declaration of Independence proved a great stimulus to both printing and the es-

[34] Willard Grosvenor Bleyer, *History of American Journalism,* p. 62.
[35] Oswald, *op. cit.,* p. 224.
[36] Bleyer, *op. cit.,* p. 70.
[37] Frederick W. Hamilton, *History of Printing in America,* p. 18.

tablishment of newspapers. Many of the early printers and editors played a large part in molding American opinion toward the break with England. At the date of the battle of Lexington, April 1775, there were thirty-seven newspapers published in the colonies.[38]

Postwar political dissensions proved an added stimulus to newspaper building. At the same time pioneers were starting west, with the printing presses following close on the first settlers. Kentucky, Tennessee, Ohio, and Mississippi had presses soon after the close of the war, and by 1814 presses had been established as far west as Indiana, Michigan, and Illinois.[39] In 1810 it was estimated that there were 359 newspapers in the country.[40] Wisconsin's printing began in 1833 when John Suydam and Albert Ellis founded *The Intelligencer* at Green Bay.

The American people became and have continued an intensely newspaper loving people. In 1929 there were listed 14,942 newspapers in this country.[41] The 2,215 daily papers alone in 1929 had a circulation of 40,175,000 copies a day, or an average of almost two newspapers for every dwelling in the United States. This is an increase of over 10,000,000 copies in the last eight years.[42] In addition there are 12,228 weekly papers, 437 semi-weeklies, and 62 tri-weeklies serving smaller communities all over this country and with circulations totalling more than 53 million per issue. Monthly magazines with circulations totalling more than 112,000,000 provide another large field for printing activity.[43]

Added to the business of publishing newspapers and magazines, the publication of books and pamphlets has grown to tremendous proportions, some half-billion being produced every year. The rapid growth of advertising has added greatly to commercial printing activity. Printing today has become a foremost factor in the promotion of all phases of commerce and industry. Printing and publishing ranks as the sixth industry in

[38] Bleyer, *op. cit.*, p. 88.
[39] Oswald, *op. cit.*, p. 228.
[40] Isaiah Thomas, *History of Printing in America*, p. 359.
[41] *Ayres Newspaper Directory*, 1929, and *Editor and Publisher Year Book*, 1929.
[42] *Editor and Publisher Year Book*, 1929.
[43] *Ayres Newspaper Directory*, 1929, and William F. Ogburn, *Recent Social Changes*, p. 135.

the United States, the total value of its products reaching two and a quarter billion dollars annually.[44]

### AMERICAN PIONEERS

Foremost among the earlier American printers stands Benjamin Franklin who has come to be regarded as the patron saint of American printers and advertisers. He was in his day the most distinguished printer in the colonies.

Franklin began his career in Boston in 1718, where he was apprenticed to his brother James and helped in the publication of the *New England Courant,* the first American paper to be published in opposition to the established authorities. But young Benjamin did not get on well with his brother, and in the next few years he saw further experience in Philadelphia and London. In 1727 he returned to Philadelphia and while in the employ of Samuel Keimer did the first type-founding to be done in America.[45] A year later he started his own printing office. He built up a very successful printing and publishing business, producing broadsides, books, and pamphlets. He also published a newspaper, the *Pennsylvania Gazette,* which he developed into one of the best of the colonial newspapers and through it did yeoman service in holding the colonies together during pre-revolutionary days. His best known work is *Poor Richard's Almanack,* which had a widespread circulation and a great influence. Franklin did much for the advancement of printing before his retirement in 1748 to devote himself to public service. His later life belongs to American history.

### ISAIAH THOMAS—PRINTER-HISTORIAN

Outstanding among printers of the later eighteenth century was Isaiah Thomas, who was called the "Didot of the United States." He built up the largest printing and publishing business in the country at the time, and operated with his partners twenty-four presses in different cities, conducted eight bookstores, and published three newspapers and a magazine.[46]

[44] *New York World Almanac,* 1929.
[45] Paul Leicester Ford, *The Many Sided Franklin,* p. 190.
[46] Hamilton, *History of Printing in America,* p. 48.

Previous to the Revolutionary War his *Massachusetts Spy* was one of the boldest advocates of the colonial cause. He was forced to flee Boston just before the Battle of Lexington, but he set up his press again at Worcester and continued as one of the most fearless patriot publishers. It was there that, after the war, he began to prosper and to build up his great publishing business. Today Thomas is remembered chiefly for the two-volume *History of Printing in America* which he issued in 1810. It is, even to this day, one of the most valuable records of the rise and development of printing and the newspaper press in this country.

### THEODORE LOWE DE VINNE

Theodore Lowe De Vinne stands by common consent as the greatest American printer of the nineteenth century. For many years he printed, for the House of Scribner, *Scribner's Monthly*, the *St. Nicholas Magazine*, and later the *Century Magazine*. In raising the typographic excellence of these magazines to a high order he developed a technical skill not surpassed by any printer of his time. De Vinne was largely instrumental in solving the problems of ink, paper, and presswork involved in the successful printing of half-tone illustrations. The first coated paper used for printing half-tones was made for De Vinne by the S. W. Warren Company. The results that he accomplished with these new processes astonished the printing world.[47]

De Vinne did service to the printing industry by promoting its organization and also by writing many books on both the historical and practical phases of the art.

While not a type designer himself, he had a good deal to do with the designing of new faces of greater beauty and legibility. One type face, De Vinne, which was named after him, has had considerable vogue, as did also another, Century Roman, which he helped to design for the *Century Magazine*.[48] It was also largely through his influence that the overelaboration of typography which characterized the bad taste of the nineteenth century gave way to the dignified simplicity that is now the accepted standard. The last half of the nineteenth century was the age of abnormal types and decorated monstrosities that made print-

[47] *Ibid.*, p. 53.
[48] McMurtrie, *op. cit.*, p. 78.

ing hideous. American printing owes De Vinne a debt of gratitude for pointing the way to a higher standard of typography.

### WILLIAM MORRIS

A contemporary of De Vinne's, who did for English printing what De Vinne had done for America, was William Morris, who, from his Kelmscott Press in London, issued fifty-three of the finest books that printing had ever seen. Morris went back to the fifteenth century printers for his models. His first type face, which he called the Golden Type because it was to be used in printing Caxton's *Golden Legend*, was modeled after the types of Nicolas Jenson. But his chief distinction does not come from the type faces he designed, but rather from showing how type should be used to create fine printing. A noteworthy characteristic of all Kelmscott publications was their rich decoration. To Morris, every page was a typographic picture.[39] Coming at a time when typographic style both in England and America was at its lowest ebb, the Kelmscott books marked the beginning of a modern revival of fine printing.

### THE NEW ERA

During the twentieth century there has been a real renaissance not only of fine printing, but of type design. An interesting fact to Americans is that not only have many new faces been created here, but that the merit of their designs has been such as to place the United States in rank second to no other country. The American Type Founders, through Morris Benton, have led in reproducing the historic types cut by the old masters of typography—such faces as Caslon, Bodoni, Cloister, and Garamond.

Frederick W. Goudy has led in producing new and beautiful faces, more than sixty having come from his hand thus far. His Village Press at Marlborough, New York, has produced some fine specimens of printing, but his principal distinction is as a type designer. His Kennerly, Goudy, and Forum Title are among the finest faces available today. The beauty and originality of Goudy's creations will have a lasting influence upon typography.

[39] Oswald, *op. cit.*, p. 308.

Barnhardt Brothers and Spindler have contributed among others two original faces of decided merit for advertising in their Cooper and Artcraft.

The Continental Type Founders Association has been instrumental in introducing to this country some of the best of the faces produced in Europe. Among their notable contributions to American printing are the Nicholas Cochins, Astree, Eve, and Kabel. Mention must also be made of the excellent group of faces designed by Lucien Bernhard, including Bernhard Roman and Bernhard Cursive, which were brought here from Germany by the Bauer Type Foundry, and Bernhard Gothics, recently designed for the American Type Founders.

Among the many notable printers today, Daniel Berkely Updike, of the Merrymount Press of Boston; Bruce Rogers, for many years connected with the Riverside Press of Cambridge, Massachusetts; Norman T. A. Munder, of Baltimore; John Henry Nash, of San Francisco; and William Edwin Rudge, of Mount Vernon, New York, have commanded attention for the artistic excellence of their printing and their influence in advancing the standards of typography.

## CONCLUSION

Brief as this historical sketch has been, it has nevertheless touched the highlights of printing history and has introduced the student to most of the great names to which he will refer again and again in his study of typography and printing processes. Modern printing craft, modern newspapers, and modern advertisers owe a large debt of gratitude to these great printing pioneers, both past and present, for the contribution each has made toward the development of the "art preservative of all arts."

## SUGGESTIONS FOR THE STUDENT

Students who are interested in carrying on their study of the history of printing will find excellent collateral readings in the following books:

William Blades, *The Pentateuch of Printing*
Willard G. Bleyer, *History of American Journalism*
Theodore Lowe De Vinne, *Invention of Printing*
Norman T. A. Munder, *Pre-Alphabet Days*
Frederick W. Goudy, *The Alphabet*

John Clyde Oswald, *A History of Printing*
Douglas McMurtrie, *The Golden Book*
Daniel Berkely Updike, *Printing Types: Their History, Forms, and Uses*
J. L. Frazier, *Type Lore*

Students should also get acquainted with the best printing magazines such as *The Inland Printer*, *The American Printer*, and *Printed Salesmanship*. They are in themselves veritable textbooks on the art and practice of printing.

## CHAPTER III

### PRINTING MATERIALS

BEFORE the work of building newspaper pages can be undertaken it is necessary to know something of the materials with which they are built—the type and other printing material with which the printer works.

For the average newspaper worker one of the first and hardest things to learn about type is its absolute inelasticity and the mathematical exactness with which type forms are made up.

Accustomed to writing on the typewriter or in longhand, he has a feeling that another word can be crowded into this type line or another letter into this headline without any trouble. He fails to realize that "type is not made of rubber," as the printers say, but that every individual letter and space is a separate piece of metal of definite size, and that each must fit together with its fellows with microscopic exactness. When a printer sets out to make up a page form of hand-set type he must fit together thousands of these tiny pieces of metal, and they must be made to fit so accurately that when he applies pressure to the four sides of his form he can lift the entire page as one piece. Not even a single piece of type must be loose or it is likely to fall out and let the whole page drop.

These metal types with which printers work to make effective advertisements and interesting and attractive newspaper pages are our inheritance from John Gutenberg and his contemporaries, and they are made of very much the same combination of elements that Gutenberg worked out after long experimentation in his little shop at Mainz. It is an alloy of lead, tin, and antimony. The lead which forms the body gives it sufficient softness so that the type will not pierce the paper. But, as lead would be too soft if used alone, antimony is added to give it some hardness, and tin to give it toughness and to cement the other metals together. This alloy also has other advantages in that it does not shrink as it cools and does not rust or corrode.

### KINDS OF TYPE

There are three different kinds of metal type:

*Foundry type*—the original form, is cast in single letters on individual bodies and is put up in *cases* with separate boxes for each letter. To set foundry type the printer picks each letter out of its box by hand and assembles his words in what is called a *composing stick.*

*Type slugs*—cast by either the linotype or intertype machines, which have been invented to promote greater speed in setting type. These machines set a whole line at a time in brass matrices, from which a solid slug is cast, containing enough words and spaces to fill one line all on one body. Needless to say, this process makes for speed and ease of handling and therefore is used on most newspapers.

*Monotype letters*—produced by the monotype machine, which actually casts single letters but assembles them in lines as desired.

In addition to metal types there are also wood types used for larger-sized jobs, such as in posters, where metal types of such size would be very heavy and expensive. They are made from close-grained wood, treated to prevent warping.

All types, no matter of what kind, have one thing in common—their uniformity in height. If they were not the same height they would not present a uniformly level surface from which an impression could be made; the short types would print faintly or not at all, and the high ones would be unduly forced into the paper. This uniform height is .918 or approximately eleven-twelfths of an inch.

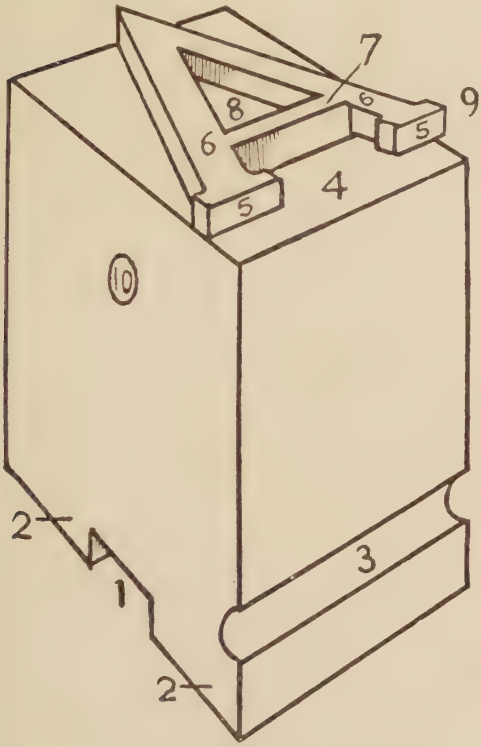
This height represents the distance from the base or feet of the type to the top or printing face. Sometimes this dimension is called the *height to paper*, and any piece of printing material of this height is said to be *type-high.*

### PARTS OF A PIECE OF TYPE

The printing character or face is cast in relief on the top of the little rectangular block of metal which constitutes a type. In order that the letter may not print backwards when its impression is transferred to the paper laid face down upon it, the

outline of the type face is made in reverse, top to bottom of the printed form. This makes it necessary for the printer to read his type upside down.

The parts of a type can best be learned by observing carefully the diagram below.




PARTS OF A PIECE OF TYPE

1. Groove
2. Feet
3. Nick
4. Shoulder
5. Neck or Beard
6. Heavy Element
7. Light Element
8. Counter
9. Serif
10. Pin Mark

At the bottom is the *groove* which gives the type two *feet* to stand on. The main body of the type is called the *shank*. On the front side of the shank and well toward the bottom are the *nicks*, of which there may be from one to four. They help the printer to identify the kind and size of type he has picked up, since all types of one size and kind will line up together and present a uniform line of nicks. They also enable the printer to tell which is the front of the type. If in glancing down his line of type he sees a blank in the uniform row of nicks, he can tell at once that he has put that one piece of type in upside down.

At the top of the body of each piece of type is a flat surface called the *shoulder,* from which the letter itself rises in relief. The actual printing surface of the letter is called the *face,* and the slope of metal between the face and the shoulder is known as the *neck* or *beard.*

The face itself has several parts. The thick down strokes are called *heavy elements;* the lighter cross strokes or connecting lines between the heavy elements are called the *light elements;* the depressions between the elements of the letter are known as *counters;* and the short cross-lines placed at the ends of all unconnected elements are called *serifs.* The serif is usually the distinguishing part of the type face. Some serifs are straight cross-lines; some are thin, others bold and blunt; some slant to form a sharp angle at the intersection with the stem; some are concave, others convex; some are heavily bracketted, others have no brackets. It is the formation of the serif, more than anything else, that gives individuality to a type face.

### TYPE FONTS

Type is put up into *fonts,* each font containing a complete assortment of one size and style of type. All the type in one font matches exactly in body, face, and nick. If the printer, for example, is setting a line of 10-point Cheltenham Bold which has two nicks, and notices a piece of type that has only one nick, he knows at once that he has picked up a piece of *wrong-font* material which will look out of place in the line. An ordinary font contains capitals, small letters, punctuation marks, numerals; special characters such as $, &, brackets, and dashes; special combinations of letters such as *fl, æ,* called ligatures; and blank pieces of type, called *spaces* or *quads,* for spacing out between words or blanking out lines. Some fonts also contain small capitals and fractions.

### LIGATURES

Ligatures demand special attention because they differ so greatly from the ordinary letters with which the student is familiar. They are made necessary by the fact that in italic and some Roman faces parts of the faces of certain letters project beyond the shoulder. The upper curve of the small *f* and the

lower extremities of the small *y* and *j*, for instance, stick out beyond the edge of the body of the type. Such letters are said to be *kerned*. Placed next to some letters, these *kerns*, as the projecting parts are known, can, of course, rest on the shoulder of the adjoining letter; but placed next to thin letters such as *l* or *i*, which provide no such convenient shoulders, the kerns are likely to be broken off. So these special combinations of letters, called ligatures, have been cast on one body in order to avoid this difficulty. They usually occur in the following combinations: *fi*, *fl*, *ffl*, *ffi*, and *ff*. Some fonts also include special oldstyle ligatures such as *ct* *st*, *œ* and *æ*.

### TYPE CASES

For convenience in handling, types are kept in shallow trays called *cases*, which are divided into many small compartments to hold the different letters. In former days when most printed matter was hand-set and a great deal of type was needed, printers used what was known as the *News case*, consisting of a pair of these trays, one above the other; the upper case, as it was called, contained the capitals and small capitals, while the lower case held the small letters, figures, and punctuation marks. From this have come our present day newspaper and printing terms for capitals and small letters, and from now on we shall speak of them as *upper case* and *lower case* respectively.

Typesetting machines today have largely supplanted hand-setting. In most newspaper composing rooms only the larger news heads and advertising heads are set by hand. In smaller newspaper plants, which rely on job work or commercial printing for part of their income, a good deal of hand-set work is still necessary. But the old cumbersome News cases have given way to the more compact California Job case. This is divided into three sections.

The right-hand section contains the capitals and some special characters, while the center and left-hand sections hold the lower-case letters, figures, punctuation marks, and spaces. It will be noticed that the capitals are arranged in alphabetical order with the exception of the *J* and the *U*, which come at the end.

When the early printers planned the capital case there were only twenty-four letters in the alphabet. There was no letter *J;*

instead, the *I* was used interchangeably as either consonant or vowel. Likewise there was no letter *U*. Its sound was represented by our present letter *V*. Thus Julius Caesar spelled his name IVLIVS CAESAR. The double *u* sound was represented by two *V*'s, which later were contracted to form *W*. This twenty-four-letter Roman alphabet was used for centuries. Then an attempt was made to avoid the confusion caused by the interchangeable use of the *I* by modifying the lower part of the letter into the *J* shape to represent the consonant sound. Later the *U* and *V* sounds were differentiated by rounding out the lower part of the *V* into the *U* form. But to have put the two new letters in their proper alphabetical order would have been very confusing to printers who had learned the case without them, so the *J* and *U* were merely added at the end.

THE CALIFORNIA JOB CASE

In addition to the capitals *X*, *Y*, *Z*, *J*, and *U*, it will be observed that the bottom row of the capital section of this case also contains the ampersand and one of the ligatures, the *ffl*. The top row holds miscellaneous special characters.

The small letters, it will be noted, are not arranged alphabetically in their sections. Instead they are arranged for the convenience of the compositor. Some letters such as *c*, *t*, *h*, *i*, *s*, *o*, and *a* are used much more frequently than others. More of these types therefore are needed, and larger boxes are required to hold them. These larger boxes of more frequently used letters are placed in the center where they will be handiest for the compositor, while the smaller boxes of less frequently used letters are arranged around the sides in the less accessible places. Note also that the boxes are so arranged that the most common letter combinations such as *and*, *ed*, *is*, *ther*, *that*, *end*, and *ent* are right at the finger-tips of the compositor and enable him to make better speed in his typesetting.

Learning the lay of the case is the first step in learning how to set type. While it is not necessary for the newspaper man to be able to "stick type" like an expert compositor, a little experience in typesetting is one of the best ways of getting an understanding of the practical problems of printing. After he has once had the experience of trying to make a line of type come out right, the desk editor will understand why he cannot send down a 13-unit headline and expect to have it go into a space that cannot possibly accommodate more than twelve units. And the advertiser who has set a little straight matter will know better than to write 200 words of copy and specify it for a space that will hold only ninety.

### HOW TYPE IS CLASSIFIED

There are many different varieties of type faces, but the student can easily get an understanding of their classification if he will consider that, just as among humans there are white, black, brown, and yellow races, so among types there are four great major divisions called *races*.

The oldest race is the Black Letter, which was used by Gutenberg and his contemporaries. It was modeled after the Gothic lettering in vogue among the manuscript writers of the time and is distinguished by exceptional blackness and detailed elaborateness of design, in which sharp points predominate as in all forms of Gothic art.

**This Line is set in Black Letter**

These Black Letter or Text faces, as they are sometimes called, are little used today except in church and holiday printing.

The second race is made up of the Script faces, which were developed to imitate handwriting. They are distinguished by the fine lines that connect one letter to another. Script letters are largely used today for social printing such as invitations and announcements, but are often used also in advertisements of toilet articles and other merchandise that is very feminine in character.

*This is an example of the Script Faces*

The third race is the Gothic or Block Letter. It is the simplest of all type styles and is characterized by extreme plainness. It has no serifs; its curves and angles are all very regular, and the letters all have the same thickness throughout. It is in fact a block letter.

**Gothic Faces Look Like This**

Some of the newer Gothics have recently come into vogue as advertising faces and many different varieties of Gothics are used by newspapers for headline purposes.

The fourth and the greatest of them all is the Roman race, originated by Pannartz, Sweinheym, and Nicolas Jenson. Roman faces are characterized by heavy strokes forming the main lines of the letter and lighter strokes forming their connecting lines. Their distinguishing feature, however, is the serif. It is largely by the variations in serifs that the student will be able to tell the different members of the Roman race from each other just as he tells Swedes from Italians by the difference in their cheekbones, the color of their skin, hair, and eyes.

This line is representative of the Roman faces

Roman faces are the best known and are in most common use today for all kinds of printing.

To carry the comparison with human races still further: just as within the white race, for example, there are different nations and many families within nations, so within each of the great type races there are many different type families. Within the Roman race are the Cheltenhams, Caslons, Garamonds, Bodonis, Centuries, and a host of others. The Gothic race includes the Franklins, Globes, Heralds, and a long list of others. The Script race is made up of Livermores, Bonds, Lining Royals, and so on. The Black Letter race has the Tudors, Chaucers, Beckers, St. Johns, and many more.

Then, just as within every human family there are some tall, thin members and others that are short and fat, so it is within

type families. One Cheltenham, for example, has a very wide face; it is called *Cheltenham Extended.* There is the common form known as *standard width* or *regular;* another with a somewhat narrower face called *Cheltenham Condensed;* and still a fourth with an extremely narrow face called *Cheltenham Extra Condensed.*

**Cheltenham Bold**

**Cheltenham Bold Extended**

**Cheltenham Bold Condensed**

**Cheltenham Bold Extra Condensed**

Many type families have members of three or four different widths to suit different purposes. The condensed widths are used very generally for newspaper headlines, while the standard widths and extended varieties find more favor in advertisements.

Within each type family are both light-complexioned and dark-complexioned members. The common body type found in most newspapers and magazines is called *lightface* Roman. When a news editor, however, has a startling lead for a story to which he would like to give greater prominence, he frequently has it set in a blacker variety of the same face called *boldface.* This bold or blackface, as it is sometimes called, is also used very frequently for the body type of advertisements for greater attention value. All newspaper headlines and most display lines in advertisements are boldface.

There is still another division into Oldstyle and Modern faces. This will be discussed in detail in a later chapter, but it may be briefly clarified now by explaining that, in general, oldstyle faces have slanting serifs, while the moderns have straight serifs. Sometimes whole families are oldstyle; their design goes back to the original designs of pioneer type-cutters. In Cloister, Garamond, and Caslon, for instance, all members of these families are oldstyle in their serif construction, although there is a special Caslon Oldstyle which has other characteristics as well that make it more nearly resemble the original Caslon. Likewise there are some families such as Bodoni that are entirely modern. Then there are other families that have both oldstyle and modern members, for example Century and Cheltenham.

Finally there are the Italics, the faces that slant to the right. Some writers have classified the italics as a separate type race, but it seems rather that they should be a classification within the Roman race, for they run all through the various Roman families and there are no italics among the Black Letter or Gothic races. Of course, most Script faces slant to the right, but that is characteristic of handwriting, which Script attempts to copy, and is not a true italic. Almost every Roman family has its italic members. Caslon italics are used for contrast with other members of the Caslon family. There are Cheltenham, Bodoni, Garamond, Cloister, Bookman and many other italics.

Each combination of these divisions within the family is called a *series*. Thus all the different sizes of Cheltenham that are extra condensed in width and bold in face from 6- to 60-point and up, go to make up the Cheltenham Extra Condensed Bold series. Then there are Cheltenham Oldstyle series, Cheltenham Bold Italic series, and so on.

If the student can keep this simple method of classification in mind, he will have taken a long step toward understanding printers' type specifications.

### HOW TYPE IS MEASURED

It has already been pointed out that one of the dimensions of type, the height to paper which is always eleven-twelfths of an inch, is uniform in all types. For purposes of measurement it is necessary therefore to consider only the other two dimensions, namely, the width and height of the type as it is seen from the letter end. But this width or height, it must be remembered, is not that of the face of the letter itself, but rather that of the shoulder from which the letter rises. The shoulder is necessarily a little larger than the face of the type in order to provide some white space between letters and lines and also to allow for the varying heights and widths of letters in any size. Thus, although the upper stem of the *b* reaches above the line and the lower stem of the *p* reaches below the line, both must be mounted on shoulders of the same height if they are to line up together. Likewise the *i* and *w* vary greatly in width, and yet the height of their shoulders must be exactly the same if they are to be set together in the same line.

The unit of measurement for this height of shoulder is the *point*, which is approximately $\frac{1}{72}$ inch. The point system was not adopted until a comparatively recent date. For many years after Gutenberg invented his types, all printers cast their own types and no two printers cast exactly the same sizes. Even within the same shop there was no attempt at a uniform gradation of sizes, and therefore it was difficult to use different sizes together. Printers were always having to "bodge" with bits of cardboard or wood to make their different sizes of type fit together in a page form. There was a series of names which applied in general to types of about the same size. Thus the size which was approximately $\frac{1}{6}$ inch high was called pica, and another size which usually ran about half the size of pica was known as nonpareil; and between were minion, brevier, bourgeois, long primer, and small pica, but all varied in size in different shops. Later, when type foundries had taken over the casting of types, the same confusion existed. The pica from one foundry would be just a little higher than the pica from another, while the bourgeois from one foundry could not be set in the same line with the bourgeois from another.

It was not until 1737 that a French printer named Pierre Simon Fournier suggested a plan of standardization. For convenience in measuring small gradations in size he divided the inch into 72 parts and called each part a *point*. He then took the pica, which was considered a standard size in most European countries, and suggested that it be made exactly $\frac{1}{6}$ inch or 12 points high by all founders. Next he proposed that nonpareil be made exactly half the size of the pica, or 6 points high. Other sizes in between could then be graduated in point units from 7 to 11. Thus minion could be standardized at exactly 7 points, brevier at 8 points, bourgeois at 9, long primer at 10, and small pica at 11 points.

Fournier's plan was an excellent one, and he succeeded in having a law passed compelling all French type founders to use his system. But after his death, Didot, another great French printer, brought the Fournier system into conformity with the legal French foot of the time (12.789 American inches), thus thickening the typographic point. Didot's system superseded that of Fournier about 1770 and remains today the accepted standard of Europe.

In America no progress was made in correlating the work of various type foundries until after the Chicago fire, when the firm of Marder, Luse and Company, one of the largest type founders in the country, lost its plant. Nelson C. Hawks, manager of the western branch of this company, persuaded his firm to adopt his point system in rebuilding their type molds. Hawks, it appears, had never heard of Fournier or his point system, but had worked out independently a system almost identical to that of Fournier except that it was based on the American foot of 12 inches. The announcement of the new system was first made in the house organ of Marder, Luse and Company in the winter of 1879. The superior merit of the point system rapidly caused other type founders to follow suit, and in 1886 the Association of Type Founders of the United States officially adopted the Hawks American System of Interchangeable Type Bodies. The American point today is therefore just a trifle smaller than the European.

### ESTIMATING SPACE

If the student will keep in mind that the point, as the unit of measurement, is $\frac{1}{72}$ inch, he can readily arrive at the dimensions of other type sizes and work out simple type problems. Six-point type is of course $\frac{6}{72}$ or $\frac{1}{12}$ inch high, while 36-point is half an inch, and 72-point type one inch high. From this it is easy to calculate the number of lines of any size of type that can be put into an inch or into any given space. It takes 8 lines of 9-point type, for example, to fill an inch of 72 points, while it takes 12 lines of 6-point type to fill the same space, provided the type is *set solid* without any extra spacing or leading between the lines. If type lines are *leaded*, an extra allowance, usually two points, must be added to the height of each line. If 8-point type is leaded, 10 points must be allowed for each line and only 7 lines can be put in an inch of space. With 10-point leaded, 12 points must be allowed for each line.

Knowing the number of lines in any given size of type that can be contained in an inch, it is then an easy matter to determine the number of words of copy that will go into that space. Merely multiply the number of lines by the approximate number of words per newspaper line of $12\frac{1}{2}$ ems, as shown in the following table:

| | |
|---|---|
| 6-point type ..... | 6½ words |
| 7-point type ..... | 5½ words |
| 8-point type ..... | 5 words |
| 10-point type ..... | 4½ words |
| 12-point type ..... | 4 words |

Another simple method is to compute space by means of the typewriter. Figuring nine average words to the typewritten line, it has been found that:

5 typewritten lines equal 1 column-inch of 7-point type
4 typewritten lines equal 1 column-inch of 8-point type
3 typewritten lines equal 1 column-inch of 10-point type
2 typewritten lines equal 1 column-inch of 12-point type

To save the printer the trouble of inserting the little strips of metal or *leads* between each line, some type founders cast smaller sizes of type on larger bodies to give the face a wider shoulder and thus create more space between lines. This also can be easily accomplished by changing the size of the mold on the casting wheel of the linotype. Thus many newspapers use on their editorial pages 8-point type cast on a 9-point body or 10-point type cast on a 12-point body. A few use 10-point cast on an 11-point body.

### THE STANDARD LINE

The position of the face on the shoulder varied until recently in different fonts and styles of type. Two different faces, though both 8-point in height, would not line up together; one would be nearer the top and the other nearer the bottom. To overcome this difficulty most American and English type founders have adopted what is known as the *standard line* on which all types are cut, so that different types can be made to line up together. There are, however, two standard lines, one for body and the other for display type. All types cut on the display line are designated as *lining series* and they cannot be combined in the same line with types cast on the standard line basis. But the inconvenience of having two different lines is bringing about a movement for a still further standardization, and even many foreign type faces, both body and display, which are being introduced are now being cast on the American standard line.

### PRINTER'S NAMES FOR TYPE SIZES

The editor or advertiser who expects to be able to direct printers will do well to learn the printer's names for the various point sizes. While the younger generation of printers has learned to call these point sizes by number, the older printers in many shops still use the old names. The following table gives some of the old names and the point sizes in which they are now cast:

| POINT SIZE | NAME | POINT SIZE | NAME |
|---|---|---|---|
| 4 | Brilliant | 10 | Long Primer |
| 4½ | Diamond | 11 | Small Pica |
| 5 | Pearl | 12 | Pica |
| 5½ | Agate | 14 | English |
| 6 | Nonpareil | 16 | Columbian |
| 7 | Minion | 18 | Great Primer |
| 8 | Brevier | | |
| 9 | Bourgeois | | |

Above 18-point the names are given in multiples of the smaller sizes. Thus 24-point is 2-line pica; 36-point is double great primer; 48-point is 4-line pica, and 60-point is 5-line pica. But even the older printers find it easier to call for the larger sizes by point designation. The sizes up to 18-point are known as body type and are used in setting the straight text or body of printed matter. The larger sizes from 14-point up are classified as display type and are used in headlines of both news columns and advertisements. Display sizes run in 6-point jumps to 48-point and then in 12-point jumps: 60- 72- 84- 96- 108- 120-point.

### HOW VARIOUS SIZES ARE USED

The newspaper man or advertiser will have little need to remember the smaller sizes of type such as diamond or pearl, for they are to be found only in small Bibles and in reference notes in small dictionaries. Agate, however, is important in that the *agate line* has been made the standard unit of measurement for advertising space. Fourteen agate lines make one column inch, and most advertising display rates are quoted on the basis of this line. But actually few newspapers use any type as small as agate any more, except perhaps in the printing of market and weather reports.

Nonpareil is about the smallest type to be found in most newspapers. It is used for unimportant stories or short items to go into a column of "Briefs." Minion is the body type most often seen in daily papers. On country weeklies, however, since the editor has less news to fill up his columns and also wishes to economize on the amount of type composition, brevier, the next larger size, is used. Brevier also is used most often in all kinds of printing work of a small size. It is the body type found in many small booklets and house organs. It is frequently used in large department store advertisements in which there is a great deal of copy. It is the size used extensively in cheap book editions.

Magazines and double-column books use bourgeois, for it is easily readable in a short column. It is too small, however, for the long lines of book work. Long primer or 10-point is the size found most frequently in books. Newspapers use it for the lead paragraphs of important stories, and an increasing number are using it for their editorial pages. It is also the size used most frequently by display advertisers for body type in newspaper advertisements. Small pica will be found in few newspaper offices. It is seldom used, except for the printing of rich book editions in which space is not important. Pica, English, and great primer are used as body type in advertisements in which larger display is desired. A few newspapers use pica on their editorial pages. All three of these sizes are also used for smaller headlines in newspapers.

### MEASURING THE WIDTH OF TYPE

The point size applies only to the height of the shoulder of the letter. To measure the width of a letter a different system called the *set size* is used. This dimension, as the name indicates, need be taken into consideration only in measuring the length of lines. The letter *m* is chosen as the unit of measurement because, in most sizes and fonts, the shoulder of the *m* is most nearly square. In smaller sizes the *m* is almost exactly square; thus the shoulder of the 10-point *m* is 10 points high and practically 10 points wide. Line lengths and column widths are accordingly designated in terms of *ems*.

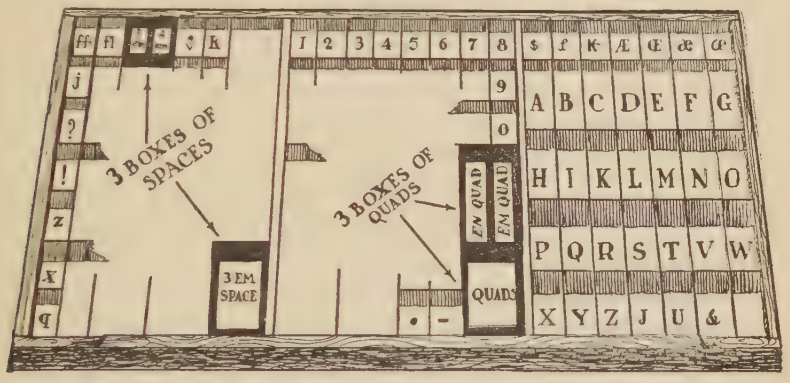
There are two kinds of ems. The one used in calculating the amount of type contained in any piece of composed matter is

called the "em of the body." The square of each size of type is the em of that body. Thus, 6-point ems are $\frac{1}{12}$ inch high by $\frac{1}{12}$ inch wide. There are likewise 8-point ems, 10-point ems, and so on. Compositors are often paid space rates on the amount of type they set. Costs of composition in commercial printing likewise are estimated on the amount of type set. Now 6-point type does not take up as much space as 10-point, and yet it would be obviously unfair to pay the printer who set the 6-point type less than the one who set the 10-point, for each would have done as much work, though the latter would have more type matter to show for his effort. This work therefore is estimated on the basis of 1,000 ems of the body in the size set regardless of the space filled. Suppose, for example that a compositor, setting at space rates on straight matter for a booklet, set in one day an amount of type that measured 24 ems wide by 125 ems deep, a total of 3,000 square ems. At the rate of $1.70 per thousand ems, his earnings for the day would be 3 times $1.70, or $5.10.

To provide a standard for the measurement of column widths, printing space, and printers' materials in general, the pica or 12-point em is used as the unit. The pica em was chosen because it is most nearly square and also because it is just one-sixth of an inch and therefore makes a convenient unit. When the printer speaks of the 12½-em column, which is the column width most frequently found on metropolitan papers, it is the pica em to which he refers. The newspaper column therefore is 12½ ems × 12 points in width, which, divided by 72, the number of points in an inch, equals $\frac{150}{72}$ or $2\frac{1}{12}$ inches. Editorial page columns accordingly are designated as 18 ems or 21 ems, and the space to be occupied by the body type in an advertisement may be designated as 20 ems, 24 ems, or whatever it may be. In addition, all spacing material and other equipment that the printer uses is either cast or cut to even multiples of the pica em. For convenience in measuring, the printer has a special pica type-gauge, usually 72 picas in length, which has divisions in both inches and picas marked upon it. If no type-gauge is available, one can easily calculate the width in picas by measuring with an ordinary ruler and multiplying the number of inches by 6, since there are 6 picas to the inch. When matter is set regular column width, there is no need to worry about ems; but for special measures for cutlines, etc., em-widths must be given.

### SPACING MATERIALS

In order to separate words in a line, to indent for paragraph beginnings, or to blank out the line at the end of a paragraph, the printer is provided with *spaces* and *quads*, which are blank type bodies less than type-high of the same point size as the type with which they are used, but cast in six standard widths. These widths are subdivisions or multiples of the em of that body. The unit for this spacing material is the *em quad*, which is the square of the size of type to which it belongs. A 10-point em quad, for instance, is 10 points high by 10 points wide.




CALIFORNIA JOB CASE, SHOWING THE LOCATION OF SPACE BOXES

Six boxes are set aside in the California Job case for spacing material. The em quads are housed in the box just below the figure *0* to the right of the center section. Just to the left are the en quads, which are always one-half the width of the quad. Thus, an en quad of 8-point type, while 8 points high, is only 4 points wide. Some printers call this the *nut quad*. Below the en- and em-quad boxes is a larger box containing the 2- and 3-em quads, which, as their names indicates, are either two or three times the width of the em quad. They are used where larger spaces are required, such as for blanking out lines.

The widths smaller than the en quad are known as spaces and are found in the left-hand section of the California Job case. In the lower right-hand corner of this section, as indicated in the diagram below, are the 3-em or 3-to-an-em spaces, which means that they are one-third the width of an em quad. This is the

standard space used between words in ordinary composition. Its box, it will be noted, is conveniently placed near the center of the lower case sections of the case so that the compositor's hand can make frequent trips to it with a minimum of effort.

The smaller spaces located in the upper left-hand corner of the case are known as 4-em and 5-em spaces and are one-fourth and one-fifth of an em quad in width respectively. In the larger type sizes, where even a 5-em space would be quite thick, *hair spaces,* which are still thinner, are provided.

For even more accurate spacing, *thin spaces* in special small cases are furnished. They are graduated in size from 6 to 72 points in height and are of two thicknesses—½-point spaces of copper and 1-point spaces of brass.

While the em quad and en quad are always exactly a square or half square of the type body, the spaces are not always exactly proportioned to the em, for they are cast on a system whereby the odd fractions of points are dropped. Thus the 5-em space of 8-point type theoretically would be 1⅝ points wide, but the odd fraction is dropped, making it exactly 1½ points. This system is particularly helpful in tabular composition and in making alignments with different sizes of type.

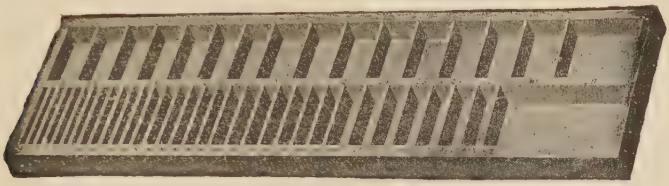
Most spaces are cast without nicks, for this material does not have front or back and a space may be turned in any position in the composing stick.

### LEADS AND SLUGS

Printers' spacing equipment also includes leads and slugs which are used for spacing out between lines of type. They are thin strips of metal less than type-high and of several thicknesses from 1 to 12 points. If less than 6 points in thickness, they are called leads; if larger, they are known as slugs. The lead most commonly used, however, is 2 points in thickness, and the slug, 6 points. In ordinary composition of smaller sizes of type, 8-point for instance, leads are used for spacing between lines, unless the matter is set solid, while slugs are used in setting off display lines or filling out wide blank spaces above or below columns, around borders, boxes, etc. Slugs and leads are also used elsewhere in a page form wherever thin strips of spacing are required.

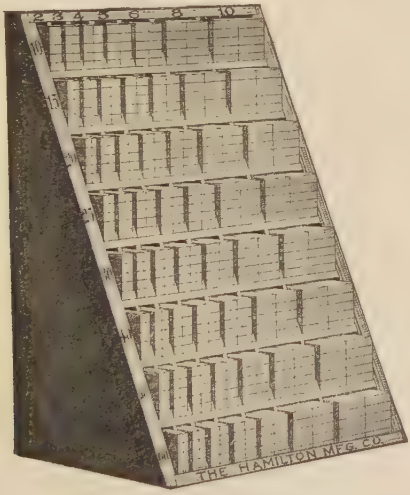
Leads and slugs are cut in graduated pica-em lengths and are

kept in the slug and lead racks placed upright over the bank of the type cabinets at which the compositor works. These racks are partitioned into little boxes to hold convenient lengths of lead and slug material.



Case for leads and slugs

Larger pieces of material for blanking out larger areas of white space are called *furniture*. Metal furniture is in the form of metal blocks of iron or steel in assorted sizes, accurately cast to pica widths and lengths so that they can be combined to blank out any desired area. They are less than type-high and are usually hollow so that their weight in a page form will not be too great.




Wood furniture cabinet

Wood furniture is lighter than metal but is less reliable, for it may swell or warp. It is used principally in locking up forms for the press. Every printing office has a large cabinet or font of this wood furniture, graduated from 2 to 10 picas in width and from 10 to 60 picas in length. The length is stamped on the end

of each piece. Larger lengths running more than 60 picas are also furnished for locking up large forms in the cylinder press. Narrow strips of this wood furniture, called reglets, also are provided in pica and nonpareil thicknesses to fill out thin space lengths in lock-up work.

### RULES

In addition to his fonts of various kinds of spacing material, every printer is equipped with fonts of *rules* cut in graduated pica em lengths. These rules are strips of brass or type metal, of the same height as the type, which are used in printing lines, boxes, and borders. The most common rules in a newspaper composing room are the very thin hair-line rule, the 2-point and the 6-point rule. The long rules that go between news columns are called *column rules;* the shorter one- and two-column widths that go below incomplete or squared off stories are known as *cut-off rules.* Every printing office also has many varieties of fancy rules and decorative borders.

### SUGGESTIONS FOR THE STUDENT

The first step in learning to set type is to learn the lay of the case. Study the illustration on page 54 and then draw a diagram of the case and try to fill in the letters in their proper position until you can do it entirely from memory. Now go to a case and locate and examine each character in turn. Run up one row and down the next, naming the boxes by the characters they contain. A little practice will soon make you familiar with the location of every box.

Get acquainted also with the various kinds of spacing material in your shop. Find out what slugs, leads, rules, wood and metal furniture, and reglets look like and where they are kept. Then observe closely some of the type forms which have already been made up on the stone or locked in chases ready for printing and see how the various kinds of printing materials have been used.

## CHAPTER IV

### HOW THE PRINTER HANDLES TYPE

NEWSPAPER pages are now almost entirely machine-set—this method of setting type will be discussed in the next chapter—but an understanding of the principles of hand composition is fundamental to any understanding of printing processes.

The setting of type or assembling of types into lines is called *composing,* and the workman who does it is called a *compositor.* The shop in every newspaper plant in which this process takes place is known as the *composing room.*

There are four divisions in most composing rooms. There is, first, the hand composition department, known in most newspaper offices as the *ad alley,* where the advertisements are set up. Special news headlines are also set up here. This section of the composing room is made up of rows of type cabinets containing cases of the different kinds and sizes of type used. At the top of each cabinet is an inclined bank on which the compositor places the particular case from which he is setting. The type is thus at a convenient height and position for him to work with it.

Second, there is the machine composition department, consisting of a battery of linotypes or intertypes and the desk of the *copy cutter,* who receives all the copy from the news room, divides it into *takes,* and passes it out to the various linotype operators at such a speed as to keep the machines producing at maximum capacity. This dignitary, incidentally, is one person with whom it behooves the young editor to keep on good terms. The copy cutter's position is one of great responsibility. He has to keep the process of translating all editorial copy into type flowing smoothly and efficiently. If the editor expects to get any coöperation from the composing room, he will do well to work with the copy cutter and consult him on all questions of typography in order not to interfere with the efficient working of the system.

COMPOSING ROOM, DETROIT NEWS

Near the copy cutter's desk is the *bank*, where the galleys of newly composed type matter rest until they are proofed-up by the proof boy and sent to the third division of the composing room, the proofreading room, a glassed-off cage where all typographic errors are marked for correction by proofreaders working in pairs.

When these proofs have been sent back to the linotype operators who set the copy, and the corrections have been made in the type galleys by the insertion of new, corrected type slugs in place of the faulty ones, the type matter goes to the fourth division of the composing room, the make-up floor, where other printers, working often under the direction of a special make-up editor, proceed to fill out the type forms and build up newspaper pages with the galleys of news matter and advertisements that have come from the ad alley and the machine composition department.

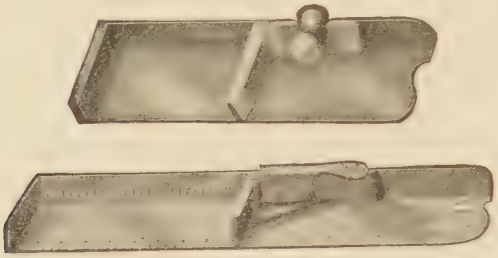
The work of these other departments will be discussed in detail later, but to give the student an understanding of some of the fundamental principles of typography we shall stop in the ad alley first and see how the printers set type by hand.

The fundamentals to be discussed in this chapter, however, will have little value to the reader unless he can carry them out in actual practice in a type laboratory or composing room. Arrangements can often be made with the foreman of the newspaper composing room to do some simple experimenting after hours, or, if that is not possible, it is easy to strike up a friendship with some nearby commercial shop and so get access to a laboratory. A number of simple exercises have been included at the end of this chapter to aid the newspaper man or advertiser who wants to get an understanding of these fundamental principles of typography. They cannot be learned from books nearly so well as by actually setting type by hand.

### THE COMPOSING STICK

The compositor assembles his types in a narrow metal tray called a *composing stick*. It derives its name from the fact that early printers actually did use a stick of wood with a long square notch or mortise cut into one side, into which they placed their types, one by one, to form a line. Today the composing stick

is usually made of metal for the sake of greater accuracy and durability. It consists of a *base* or *bottom plate* upon which the feet of the type rest; a *back plate* upon which the first line of type rests and upon which succeeding lines of type are built up; a movable *knee,* which is screwed or clamped to the back plate in the position desired, to form one side of the line; and the *end plate,* which forms the fixed side.



TWO TYPES OF COMPOSING STICKS

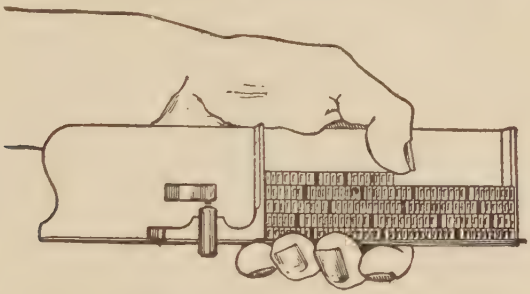
**The upper stick is set with a thumb screw the lower with a clamp.**

There are several styles of sticks under various trade names in use today. The Rouse, Star, and Standard are equipped with clamps that automatically set the knee at even pica widths. The older type of screw stick does not have any graduated pica-em scale, and the knee is set at any desired width with a thumb-screw. Sticks vary in size from six- and eight-inch lengths for straight composition and smaller job work to the large job sticks twenty inches in length. The latter are usually made of wood and will hold 8-column display lines.

The first step in composing is to set the stick to the measure desired. If the compositor, for instance, is working on an advertisement in which a block of copy is marked 18-ems width, he fixes the knee at that point on the scale of the stick. A slug of the same measure is then placed in the stick against the back plate, so that when the type is lifted out of the stick the slug will serve to keep the types of the first line from falling apart. The compositor holds the stick in his left hand with the open side toward the case. His thumb reaches down over the top inside the stick and close to his fingers across the bottom. The stick is tilted slightly so that the letters will not fall when placed in position.

### HOW TO SET TYPE

The compositor stands erect before the case and with his free right hand picks the letters out of the case before him. Each piece of type is placed in the stick with the nick up and the face toward the compositor. Hence, when looking for a piece of type in one of the boxes, the compositor looks for the nick first and selects quickly a type that can be carried to the stick right side up with the fewest motions. As soon as the fingers of the right hand have placed the type in the stick, the thumb of the left hand pulls it tightly into its place in the line and the eyes of the compositor go immediately to the case to select the next letter. Each



HOW TO HOLD A STICK

(From Selvidge and Witt, *Instruction Manual for Young Printers*, The Manual Arts Press.)

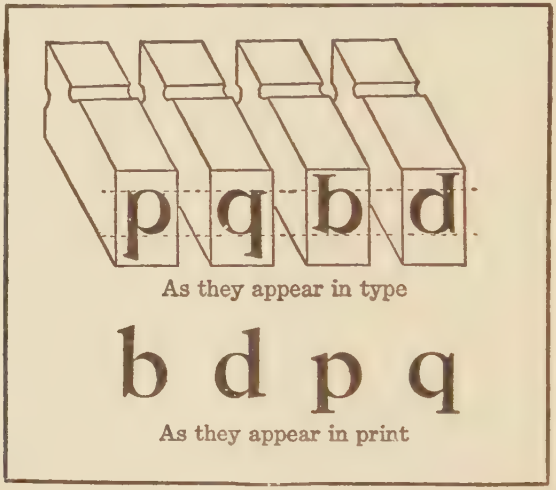
successive letter is placed to the right of the preceding one, and the left thumb moves to a new position with each letter so that it may hold the line firmly in place. In order to attain speed the compositor swings his left hand freely above the case so that the stick may incline to meet the right hand which is bringing the types to it. A good compositor does not look at the letter after he has picked it up, but lets his fingers do the work of placing it while his eyes go at once to sight the next letter. Only in this way can speed be acquired.

When set in the stick in this fashion, with their nicks up, the type faces themselves are all upside down. One of the first things that the beginner must do is to learn to read type. It is read from left to right as are the lines of all printed matter, but the top of the type face is nearest the compositor so that the face is upside down and must be read that way. It must be remembered that

any printing form must of necessity be in reverse in order to print right side up and in proper order on the page. Thus the type line as it appears in the stick is in its natural position for printing and must be read in that position. A little practice will make this easy.

### THE FOUR DEMONS

One of the greatest difficulties that the student encounters at first is to distinguish between the four demons, the letters *b*, *d*, *p* and *q*, which are very similar in form and, when read in reverse,




How to identify the four demons
(From Polk, *The Practice of Printing*, The Manual Arts Press.)

are very confusing for the beginner. One good way to tell them apart is to remember that two have ascending strokes and two have descending strokes. Now, since these are read in reverse, one must imagine that the stroke of the *b*, for instance, which appears as a descender when read upside down, is pushed up as an ascender instead. Immediately the letter is readily identified as *b*. The same method works just as well for the other three demons, for the bowl of the letter faces in the same direction whether read type-ways or print-ways. It is merely the ascender or descender which appears reversed. Another method is to remember that the *b* and *p* and the *d* and *q* are exactly in reverse of each other.

Hence, if the type is held with the nick up and it looks like a *b*, it is a *p*, and vice versa; while the *d* looks like a *q* and the *q* like a *d*.

The *u* and *n* and the *6* and *9* are likewise in reverse of each other, but a little practice in reading type will soon enable the beginner to tell these apart.

### JUSTIFICATION AND SPACING

After the compositor has set the letters to form one word, a 3-em space is ordinarily placed between it and the next word. No attention need be paid to placing spaces or quads nick up; in fact, in many fonts spaces are cast without nicks. The letters are set one by one until a line has been filled. It is rare, of course, when a line comes out exactly even. The last word is usually either a little short or a little long for the line. If the word is too long and if it is of more than one syllable, it can be divided by placing a hyphen at the end of the line and carrying the extra syllable or two over to the next line. Even then it is seldom that the line fills out exactly without any *play*.

And there must be no play. Unless each line fills out exactly the same width, the types will be loose and will drop out of the form, or they will lean slightly to one side and be *off their feet* so that their faces will not strike the paper squarely. To make the line exactly fill the measure of the stick, additional spaces must be added until the line is tight enough to stand by itself if pushed up in the stick. This process is called *justification.* Before justifying, however, each line should be carefully read and any errors corrected, for it is easier to make corrections then than later.

The newspaper man who has been accustomed to writing on the typewriter has always permitted his lines to end unevenly and to present a ragged right-hand margin. It is difficult to do anything else on the typewriter. But by looking at any printed page it will be observed that its margins are straight and even on both sides. The last word or syllable comes out flush with the margin or column rule. To accomplish this it is clear that the compositor must do his justifying between words rather than at the end of the line. If the 3-em spaces between words are not sufficient to fill out the line, he substitutes larger spaces or combinations of

spaces. An expert compositor notes how much space is required to fill the line and from experience knows the combination of spaces that is necessary to accomplish this. The student can easily figure out the spacing required by measuring the amount of space that the line is short and dividing it by the number of places between words. Suppose, for example, that the line lacks what appears to be about 2 ems. By measuring with a 2-em quad, the typesetter finds that it exactly fills the line. Looking back he notes that there are ten places between words in the line. Since $\frac{1}{10}$ of 2 ems is $\frac{1}{5}$ em, then, if we add a 5-em space to each of the 3-em spaces already between the words, the line will come out exactly even.

Often the amount of space to be taken up is too small to permit the placing of additional spaces between each word. Placing a little extra space between one or two words will be enough to fill out the line. In that case it is best to look along the line to where two tall straight letters come together as the last and first letters of adjoining words. Because of the height of these letters, additional spacing will not be noticed between them nearly as much as between two short letters.

Every careful compositor tries to make his line appear evenly spaced by taking this factor into account. A line that has the same amount of space between words might not appear evenly spaced because of the differences in individual letter formations. Poorly spaced lines are unsightly and hard to read. Hence, the compositor tries where possible to get a little more space between tall letters in order to make the spacing appear equal. Care also should be taken to have equal spacing on either side of short words such as *in*, *on*, or *at*, because any variation there would be easily noticeable. Where it is necessary to reduce the amount of spacing slightly in order to get in a letter to complete a line, space should first be decreased between sloping or rounded letters or in intervals that include such punctuation marks as the period, comma, or apostrophe —marks which cover very little of the shoulder of the type.

When the beginner discovers that 3-em spaces between words are not enough to fill out the line, he may be tempted to start at one end and merely add thinner spaces to the 3-ems until the line is firmly justified. This is not good practice, for it causes part of the line to be more widely spaced than the rest, producing a

broken appearance that is displeasing. Unless spaces can be added to all the 3-em spaces in the line, none should be added, but substitutions should be made for all the 3-em spaces.

### COMBINATIONS OF SPACES

The various space thicknesses can be combined and recombined into almost any fraction of an em to get the right spacing to firmly justify the line. The following table shows how these combinations are built up:

| *Spaces* | *Fraction of an em* |
|---|---|
| 5-em | 12/60 |
| 4-em | 15/60 |
| 3-em | 20/60 |
| Two 5-ems | 24/60 |
| 5-em and 4-em | 27/60 |
| En-quad | 30/60 |
| 5-em and 3-em | 32/60 |
| 4-em and 3-em | 35/60 |
| Three 5-ems | 36/60 |
| Two 3-ems | 40/60 |
| 5-em and en-quad | 42/60 |
| 4-em and en-quad | 45/60 |
| 3-em and en-quad | 50/60 |
| Two 5-ems and en-quad | 54/60 |
| 5-em, 4-em, and en-quad | 57/60 |
| Two 5-ems, 4-em, and 3-em | 59/60 |
| Em-quad | 60/60 |

If, for example, the 3-em spaces are not quite enough to fill the line, the next combination is to use two 5-em spaces between each word; if that is not enough, the next step is a combination of a 5-em and a 4-em space, and so on up the scale.

### SPECIAL RULES FOR SPACING

Since punctuation marks are thinner than most letters and occupy less of the body of the type, spaces thinner than the common space are customarily used after them. Thin spaces are also used to separate the text from quotation marks, parentheses, exclamation points, and question marks.

Sentences are separated by more space than words. If the common space between words is a 3-em, an en quad is used between sentences.

At the beginning of each paragraph the indention is secured by placing a quad at the beginning of the line preceding the capital of the first word. In matter set 18 ems or less in width the em quad is used for indention. In wider measures the 2-em quad is used. A careful compositor also closes each paragraph with an indention of at least a quad. The best practice dictates that the concluding line should never be spaced out to bring the final punctuation mark at the end of the line.

### DIVISION OF WORDS

Since it frequently happens that in justifying lines, words must be broken in order to avoid awkward and unsightly spacing, the proper division of words becomes a question of concern to the compositor. Words of one syllable, of course, are never divided. Longer words must be correctly divided between syllables, and a hyphen placed after the break in the word. Care must be taken, however, not to have a number of consecutive lines ending in hyphens if it can possibly be avoided.

A syllable of one letter is never separated from the rest of the word. Likewise if the last syllable contains but two letters it is never carried over, for, if there is room for a hyphen, there is also usually room for the two letters, and two letters standing alone at the beginning of a line would look lost and meaningless. It is usually safe to divide between double letters. Words ending in *ing, able,* or *ible* may be broken before the vowel, and the suffix carried over. In all words containing a single vowel preceding a last syllable not ending in *ible* or *able* the word should be divided to retain the single vowel on the first line and to carry over the final syllable to the second. Thus it should be *mechanical,* not *mechan-ical.* Unless absolutely necessary, short words such as *ever, only, into, upon* should never be divided. A helpful rule is to break, where possible, at the accent of the word, for this makes it easier for the reader to follow the sense of the sentence. Compound words should always be divided into their elemental words rather than on syllables, for the latter would bring two hyphens too close together.

These are only a few of the rules that the printer has to keep in mind continually, but these few will cover most of the problems that the student will encounter. Sometimes in setting very narrow measures even some of these rules have to be violated, but they should be followed as closely as possible.

### HANDLING TYPE FORMS

When the first line has been set and firmly justified, a narrow strip of metal called a *lead,* the same measure as the stick, is placed across the front of the line of type to serve as a base upon which to set the second line. If the matter is to be set solid, a *composing rule* is used instead of the lead. This is a piece of brass more than type high, with a little projection on each end to enable the compositor to lift it out of the stick easily after each line is set. It is difficult to set one line on top of the other because the nicks of the line below catch the feet of the type going into the new line. But the composing rule serves as a hard, smooth base against which the types slide easily into place. As soon as one line is set, the composing rule is moved up as a base for the next line, and so on until the stick is full. Composing rules come in sets graduated in length from 4 to 45 picas.

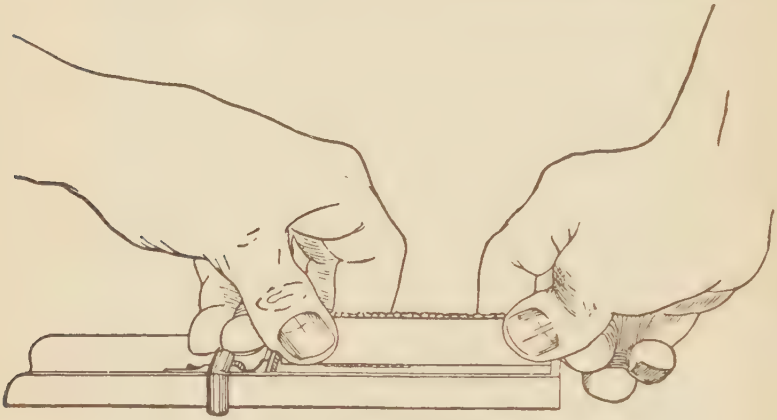
Every line in turn should be carefully justified. A line is considered justified when it will stand up in the stick without support other than its own tightness. If a line threatens to fall down when the stick is tilted slightly forward, it is too loose. On the other hand, lines should not be so tight that they cannot be easily lifted out of the stick. A good rule to follow is never to use anything but the bare finger to force the last piece of type into a line. Too much pressure may "spring" the stick or shave a thin film of metal from the pieces of type on either side.

### HOW TO EMPTY THE STICK

When the stick is nearly filled with type it is ready to be emptied. First, a lead the same measure as the stick is placed against the nick surface or exposed side of the type. Since another lead was placed against the back plate before the compositor began, the type matter is now protected on both sides by leads.

Before removing the matter from the stick, the compositor places a flat rectangular tray, called a *galley,* on the inclined bank of the type cabinet at which he has been working. This galley has but three sides and is open at one end. For convenience in handling, the galley is always placed on the bank with the open side to the left.

The composing stick containing the type matter is then placed flat on the galley with the bottom of the type or the open end away from the compositor. The knee remains clamped in position and should never be unfastened in emptying the stick lest the types thus left exposed fall out of their lines. The compositor



How to empty the stick

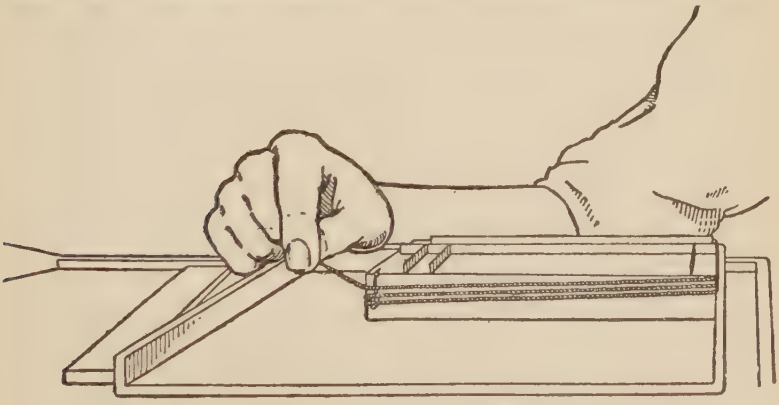
(From Selvidge and Witt, *Instruction Manual for Young Printers,* The Manual Arts Press.)

places the thumbs and forefingers of each hand at the top and bottom of the type matter. The flexed ends of the middle fingers of each hand are pressed against the other two sides. With the type thus firmly gripped, the compositor pushes it toward the open end of the stick, at the same time sliding the balls of the thumbs down against the type to grip it more securely. Simultaneously he tips the type forward and with a rolling motion brings it into a horizontal position with the feet of the type facing the compositor. Still holding the type matter firmly between the thumbs and fingers, the compositor can then easily lift it out of the stick and with a quick motion set it down and slide it safely into the lower right-hand corner or *head* of the

galley. For the beginner, instead of trying to roll the type out of the stick, as does an experienced compositor, it may be better merely to slide it forward out of the stick onto the galley. From there it can be moved to its position of safety at the head of the galley. Here the inclined position of the galley and its two sides give support and protection to three sides of the type matter, but a small block of furniture should be set against the unprotected end to keep the last line from tipping over. The head of the type should be placed against the head of the galley, with the type matter resting on its left side. Only in this position can type be read and handled properly.

### TYING UP THE FORM

The next step is to "tie up the job" to prevent its being *pied* in further handling. Holding the end of the cord in his left hand, the compositor starts at the left top corner of the type as it lies in the galley and, with his right hand, winds the cord tightly along the upper side, down the head, across the lower end, and

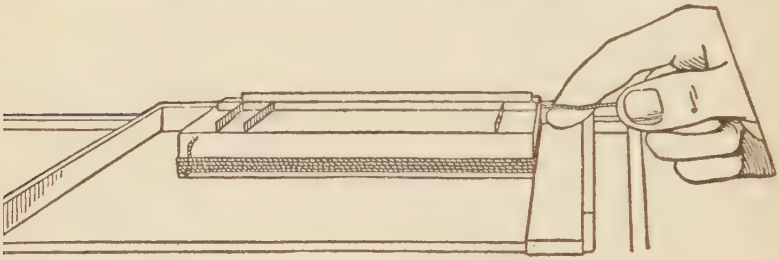


HOW TO TIE UP A FORM

Crossing the cord over the first end to bind it. (From Selvidge and Witt, *Instruction Manual for Young Printers*, The Manual Arts Press.)

up to the starting point where he crosses the cord over the first end to bind it. Three or four more turns around the job are made, and each time the compositor gets back to the corner from which he started he crosses his cord over and below the preceding turn. The last time he carries his cord around the top

right-hand corner, and then with a lead or composing rule he loops the loose end down between the types and the several windings of cord and draws it tightly back against the corner. The job can then be moved away from the side of the galley so that the string can be pushed down all around the type to



How to tie up a form

Pulling the cord tight before fastening the loose end. (From Selvidge and Witt, *Instruction Manual for Young Printers*, The Manual Arts Press.)

hold it more firmly. A firm hold should be kept on the job at all times while tying it up. If the cord is drawn tight just before each corner is reached, the job will be securely bound together. Care must be used, however, even in the handling of type forms that are tied up, for unless held firmly they are quite likely to be pied.

### TAKING THE PROOF

After the job is tied up, the next step is to take a proof to see whether any corrections are necessary. The simplest kind is the *stone proof*.

The type is carried in its galley to the *stone* or marble-topped table on which type forms are made up. After making sure that the surface of the stone is free from dirt or loose type, the type form is slid out of the open end of the galley onto the stone. It is then inked with a small hand roller known as a *brayer*, and a sheet of paper is laid carefully over the face of the type.

The compositor then takes in his left hand a wood block called a *proof planer*, padded with felt on the bottom, and in his right hand a wooden mallet. The planer is placed evenly on the paper, with the padded side down, and held firmly with the left hand while it is tapped with the mallet until the impression of the type shows through the paper. If the planer does not cover the

whole type form, it is lifted carefully by raising one edge as if it were hinged and then moving it to the next position, where the process is repeated. Care must be taken that the blows from the mallet fall straight down and that the planer is not allowed to slip or rebound on the paper lest it blur the proof. When the whole surface of the type form has been covered by the planer, the paper is carefully lifted from the type by raising the opposite corners.

The ordinary paper used for stone proofs is a thin stock glazed on one side and rough on the other. It is commonly known as dry proofing paper. The smooth side is laid on the face of the type. When other paper is used, a soft stock should be chosen. Common book paper or even newsprint is frequently used. Soft paper should be dampened evenly all over one side with a sponge, so that it is limp but not too wet. The dry side is then placed face down on the type. Sponging the paper keeps it from slipping on the type and gives a better proof. The paper should be larger than the type form to allow a margin all the way around in which to mark corrections.

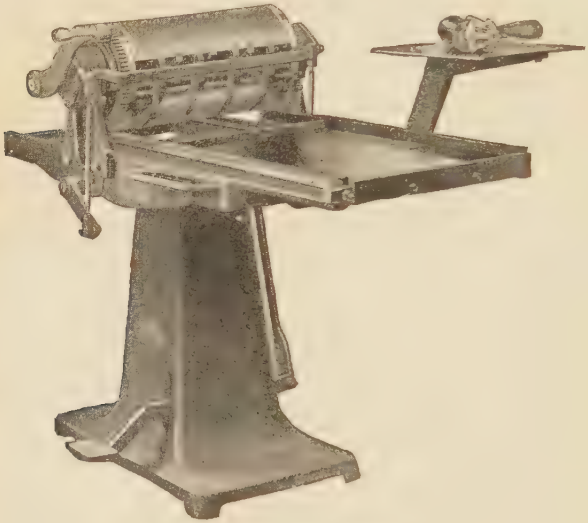
Taking a stone proof with a planer is the most rudimentary method of making an impression. It is, however, not easy, for it takes long experience to get a good proof. Even at best, stone proofs are not very satisfactory. They are used mostly for rough first proofs and for emergencies where, for instance, page forms are too large for the proof press.

### PROOF PRESSES

All printing shops are equipped with proof presses for taking more accurate proofs. Straight matter is usually placed in long galleys, and proofs are pulled on the *galley press*. This is a simple framework surmounted by a flat bed. On the two long sides of this bed are raised tracks on which runs a heavy iron roller covered with felt. The galley containing the type is placed on the bed of the press, the type is inked with a brayer, a sheet of paper is placed on the type, and the roller is run over it. If the impression is too light, a thin sheet of cardboard or one or two sheets of paper placed under the galley will raise the type sufficiently to print clearly.

Larger jobs, which have been made up into display or page

forms, are proofed on regular proof presses. There are several different varieties. One of the most popular is the Washington hand press similar to the presses used by early printers. It has a movable bed in which the type matter is placed and inked. Paper is placed on the type, and a hinged tympan or cloth-covered, wooden framework is lowered over it. By means of a windlass the bed is moved under the impression plate or *platen*. A hand lever, operating a toggle joint, pushes the platen down on the type to make the impression. The bed is then withdrawn, the tympan lifted, and the paper removed. It is rather a slow opera-



POTTER PROOF PRESS

tion, but it gives a very fine, even impression. Washington hand presses are used in many engraving plants for taking proofs of the finest engravings. The Washington hand press is particularly interesting to the student of journalism, for many famous American newspapers began publication on this type of press.

More common in newspaper and printing offices today is some form of the cylinder proof press. The Poco, Potter, and Vandercook are among the best known. These presses have a cylinder that rotates in stationary bearings and a movable bed that is racked to move in unison with the cylinder, sliding the bed backward and forward under it. Some provide grippers to carry the

sheet around the cylinder instead of letting it lie loose on the type. Some of the more improved types also ink the forms automatically. Cylinder proof presses are made in various sizes. Most modern newspaper plants have power driven, self-inking proof presses with beds large enough to hold full-size newspaper page forms.

As soon as the proof has been taken, the type should be cleaned. If left standing, the ink will dry and harden. Good printing cannot be done from types that are caked with ink. The cleaning is accomplished by softening the ink with a solvent such as benzine, gasoline, or kerosene and then removing it with a rag or brush. Benzine is the most common solvent. It loosens the dry ink quickly, evaporates in a few moments, and leaves the surface dry. Quite often after the ink has been wiped from the face of the letters a small stiff brush is needed to clean the shoulders and counters of the type. When type has become extremely dirty or caked with ink it can be cleaned by scrubbing it with a lye solution.

### HOW TO MARK PROOF CORRECTIONS

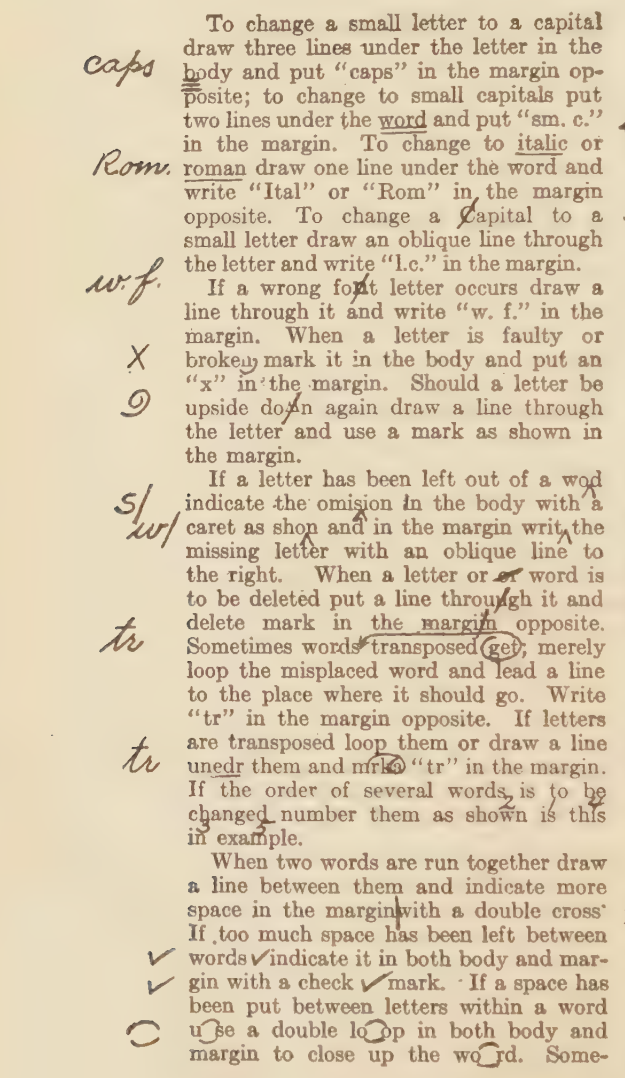
Every newspaper worker should know how to mark proof corrections. While larger newspapers have professional proofreaders, every desk editor should know how to mark proofs to make the necessary changes in those that come to him. On smaller papers, members of the editorial staff have to do all the proofreading.

The proofreader works with an assistant known as the copy holder, who reads the original copy aloud—punctuation marks, capitals, paragraphing, type changes, everything. The proofreader follows the proof and marks all deviations from the original copy.

Marking proof differs from reading copy in that all the marks are made in the margin. This is because the printer who is to make the corrections does not have time to read all through the proof in search of corrections. So instead of placing the marks in the body where they might be overlooked, they are placed in the margin opposite the lines containing the errors, so that the printer can easily see them. For each error two marks are made, one in the margin, which tells the printer the kind of an error

it is and the correction to be made, and one in the body, showing the exact location of the error.

Proofreading marks are fairly well standardized all over the country. There may be a few variations in different shops, but if the newspaper man masters the marks shown below, he can make himself understood to printers everywhere.




To change a small letter to a capital draw three lines under the letter in the body and put "caps" in the margin opposite; to change to small capitals put two lines under the word and put "sm. c." in the margin. To change to italic or roman draw one line under the word and write "Ital" or "Rom" in the margin opposite. To change a capital to a small letter draw an oblique line through the letter and write "l.c." in the margin.

If a wrong font letter occurs draw a line through it and write "w. f." in the margin. When a letter is faulty or broken mark it in the body and put an "x" in the margin. Should a letter be upside down again draw a line through the letter and use a mark as shown in the margin.

If a letter has been left out of a word indicate the omision in the body with a caret as shown and in the margin write the missing letter with an oblique line to the right. When a letter or a word is to be deleted put a line through it and delete mark in the margin opposite. Sometimes words transposed (get), merely loop the misplaced word and lead a line to the place where it should go. Write "tr" in the margin opposite. If letters are transposed loop them or draw a line unedr them and mrk "tr" in the margin. If the order of several words is to be changed number them as shown is this in example.

When two words are run together draw a line between them and indicate more space in the margin with a double cross. If too much space has been left between words indicate it in both body and margin with a check mark. If a space has been put between letters within a word use a double loop in both body and margin to close up the word. Some-

times a space prints up. Draw a line through the space and use this mark in the margin to show that the space is to be pushed down.

For more space between lines indicate the place with a caret and write "lead" in the margin. To indicate less space between lines use caret at side and write "delete lead" in the margin.

If letters or words get out of line use this mark to lower a letter and this to raise a letter. Use this mark to move matter to the right and this to move matter to the left.

When several letters in a word are out of alignment draw a line above and below the word and a pair of horizontal lines in the margin. If several lines are crooked draw lines above and below them and indicate with three horizontal lines in the margin. To begin a new paragraph show place with caret in the body and use the customary paragraph sign in the margin.

When no new paragraph is desired use the run-in-line as shown or mark it "No ¶."

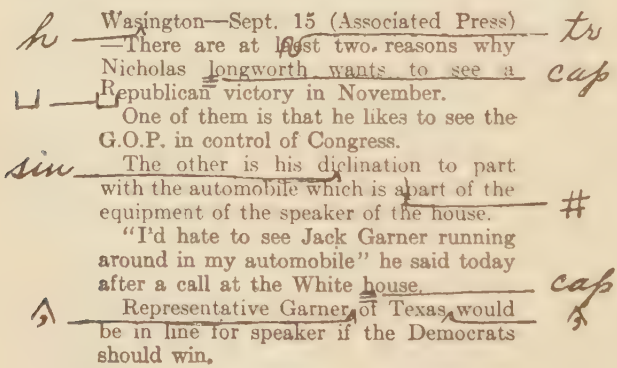
To insert a punctuation mark show place with caret in body and indicate mark wanted with oblique line to right in margin. Periods and colons are ringed to avoid error. To substitute one mark for another simply draw line through the one in body and put mark desired in margin. To avoid confusion the apostrophe and quote marks are set off with an inverted caret to show that they go above the line. If a dash is omitted it is indicated thus with the numeral 1 or 2 to show em-width desired. The hyphen is indicated by a short dash between two oblique lines.

Should the proofreader by mistake cross out a ~~word~~ or phrase, he writes "stet" which means "let stand" in the margin. If the compositor has left out a line or two it is marked

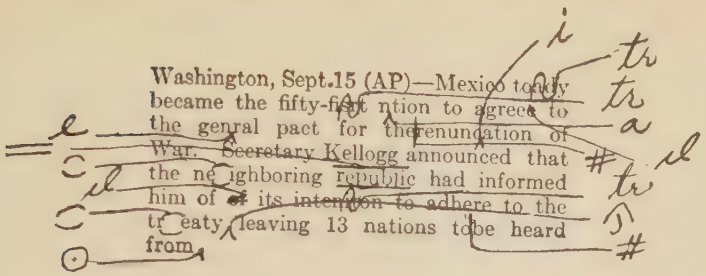
### AVOID UNNECESSARY CHANGES

In reading proof it must be remembered that the writer's copy is authority and the proofreader's function is simply to make the proof conform to the original copy. Even when the desk editor or advertiser is reading proof on his own copy, he should avoid making any changes that will involve a great deal of resetting. If changes have to be made, the proofreader should leave the line to be corrected the same length as before so that several lines will not have to be reset in order to make room for new matter that has been inserted. There is nothing that will meet with greater antagonism from the composing room than to have to reset matter because of changes that should have been made in the original copy before it was sent down. If the desk editor wishes to keep the good will and cooperation of the composing room, he will handle his proofs in such a way as to make the work of the compositors as easy as possible.

In correcting linotype copy, newspaper proofreaders frequently use a connecting line between the error in the proof and the proof mark in the margin, as shown in the example below:


Washington—Sept. 15 (Associated Press)
There are at last two reasons why
Nicholas longworth wants to see a
Republican victory in November.
One of them is that he likes to see the
G.O.P. in control of Congress.
The other is his dislination to part
with the automobile which is apart of the
equipment of the speaker of the house.
"I'd hate to see Jack Garner running
around in my automobile" he said today
after a call at the White house.
Representative Garner of Texas would
be in line for speaker if the Democrats
should win.
tr
cap
sin
#
cap

When there are few errors, this method is satisfactory, and the connecting lines help the linotype operator find the corrections to be made. If, however, the proof is very "dirty" and there are a number of errors close together, the many connecting lines and loops become very confusing.


Washington, Sept.15 (AP)—Mexico today
became the fifty-fi[illegible]nation to agree to
the genral pact for the renunciation of
War. Secretary Kellogg announced that
the neighboring republic had informed
him of its intention to adhere to the
treaty leaving 13 nations to be heard
from.

In that event it is better to use the method of marking proofs shown on pages 86 and 87.

### MAKING CORRECTIONS

After the proofreaders have completed their task, the proof is returned to the compositor for corrections. In hand-set matter, if there are only a few errors and the letters to be substituted are of the same thickness as those to be taken out, the job can be corrected on the stone. Letters that are upside down, for example, can be changed around, damaged letters can be replaced by good ones, a *u* might be substituted for an *n* without disturbing the justification of a line.

But if the letters to be substituted are not of the same thickness, then the job must be placed in a galley and the string removed. Each line to be corrected must be taken up again in the stick, the error corrected, and the line accurately respaced and justified again. Guesswork in trying to justify lines in the open galley is bound to be inaccurate and is likely to cause trouble in all future handling of the form. To replace any one line in the stick the compositor merely opens up the type so that this line can be tilted forward. Then, by gripping the line on all sides, it can easily be lifted back into the stick.

Proofs of linotype matter are sent back to the operator who set the story. Since each linotype slug is a whole line of type, it is necessary for the operator to reset entirely every line in which an error occurs. These corrected slugs are wrapped in the proof and sent back to the bank, where the type matter for the story has been held since the first proof was taken. Here the proof boy or one of the floormen substitutes the new slugs for the faulty ones.

When every error marked on the first proof has been corrected,

a second proof or revise may be taken to insure that no other errors have been overlooked. This is, however, more common in book work than in newspaper work.

When all corrections have finally been made, the type matter is "cleared" to the make-up bank and is ready to be made up into the display forms or page forms for which it is intended, a process that will be discussed in a later chapter.

### HOW TO DISTRIBUTE TYPE

After all the required material has been printed from the type matter, this type becomes "dead matter." Linotype slugs are returned to the melting pot, but in hand-set matter the letters must be returned to the cases from which they came. This process is called *distribution.*

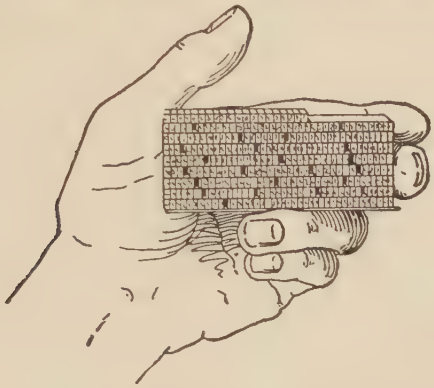
The type to be distributed must first be thoroughly cleaned as has been described above, for it would not do to throw dirty type back into the cases. Then the type form is placed in a galley, the string is removed, and the type is pressed snugly up against the head of the galley. Several lines at a time can then be lifted from the foot of the matter.

Before throwing any type back into the case, the compositor compares the type he has in hand with the type in the case he has selected, to make sure that it matches exactly in face, nick, and size so that he will not be throwing wrong font material into the case. Preliminary to picking up the type, the compositor takes a sponge and wets the type with clean water. This loosens any letters that may have become gummed together with dirt or ink, and at the same time the drops of water help to make the separate types adhere to each other so that they handle easily.

Making sure that there is a slug or lead at the top and bottom of the lines he intends to lift, the compositor grips the lines just as he did in first removing them from the stick, with the thumbs and forefingers at the top and bottom and the middle fingers along the sides. With a quick turn of the wrists he lifts the type to a horizontal position. The face of the type must be toward the compositor and the nicks up, else the words cannot be spelled off in their natural order as they are distributed.

The type lines are then tilted slightly to the right so that the left hand can hold them alone while the right hand shifts into

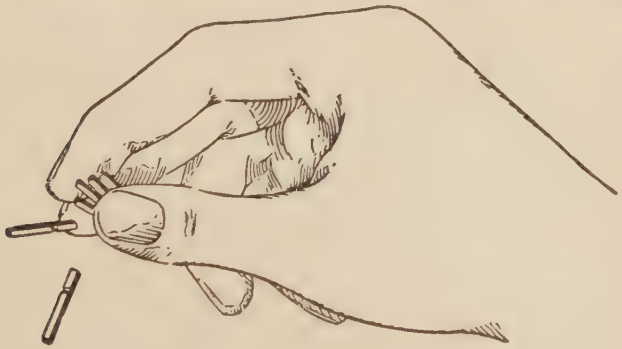
position for distributing. With the palm up, the left-hand thumb then is placed against the left side of the type lines while the middle finger is pressed against the right side. The first or index



How to hold type for distribution

(From Selvidge and Witt, *Instruction Manual for Young Printers*, The Manual Arts Press.)

finger is slipped under the bottom slug under the type matter to support it from beneath. When the measure is too long to hold in this manner, the type matter is placed well toward the



How to distribute type

(From Selvidge and Witt, *Instruction Manual for Young Printers*, The Manual Arts Press.)

palm of the left hand and tilted slightly to the left against the thumb, while it is supported on the bottom by the third and fourth fingers and at the back by the first and second. Either

way, the type is in the same position as it was in the stick, with the letters upside down and reading from left to right.

The compositor then starts at the right end of the top line, and with the middle finger of his right hand slides the last word slightly forward toward him, at the same time moving the right thumb underneath the word. The first letter of the word will be the first in position to be dropped off, so that the word can be spelled off as it is distributed. The types of this word are now held over the case between the thumb and the middle finger. The forefinger is then brought down into position in back of the first letter. A little pressure on the middle finger tilts up the first letter, and the forefinger acting as a "kicker" pushes it off into its box. The forefinger then moves in back of the second letter, permitting it to be tilted up and kicked off, and so on until the entire word has been spelled off into the case. Succeeding words are distributed in the same fashion until all the type in the form has been returned to the case.

The newspaper man who has never done any distribution before will find his first attempt very slow and laborious. But speed will come with practice. Accuracy, however, is the first requirement. Careless distribution results in a "dirty case" that will handicap the work of all compositors setting from that case. Particular attention should be paid to the *b*'s, *d*'s, *p*'s, and *q*'s, the *w*'s and *n*'s, and the cap *I*'s and lower case *l*'s, which are very confusing until one becomes familiar with the inverted appearance of the type.

If the type form to be distributed contains different sizes and kinds of type—display lines, perhaps, as well as body type—it is best to separate the different kinds and sizes, place them in separate galleys, and carry them to the cabinets in which they belong. This avoids errors and saves walking back and forth.

It frequently happens that in distributing, a few words or a line may be spilled or *pied*, as the printer terms it. *Pi* should be set in a stick with the nicks all one way and then distributed in the same manner as straight matter. If several different sizes of type are in the pi, sort out all the pieces of one size and nick first, then set the next smaller group of the same size and nick, and so on until all the pi has been assembled and can be distributed again. Pi should never be distributed from a loose pile in the hand. That is certain to result in dirty cases.

### RETURNING LEADS AND SLUGS

After all the type in a job has been distributed, the leads, slugs, and furniture must be returned to their proper places. The easiest way is to separate the furniture first and return it to the boxes in the furniture fonts. Then jog all the slugs, leads, and rules into an upright position and stand them on end in a galley. Pick out the tallest ones and place them together at the end, then go through the rest of the lot, arranging them in descending order. Leads and slugs can then easily be separated and returned to their boxes in the lead and slug racks. It is well to check each length with a gauge to make sure that odd lengths are not mixed with the even pica lengths. Those which prove to be *bastard* lengths, as they are called, can be cut down to proper labor-saving lengths.

Rules and borders require special care, for ink collects rapidly at the upper or printing edge. Sometimes it is necessary to lay the rules flat on the galley and wipe them with benzine before putting them away. Rules are also kept in cases of labor-saving lengths, and the different lengths of rule from the job should be returned to their proper boxes with the same care that is exercised with the leads and slugs. Borders are likewise kept in separate cases, but unless a large amount of any particular border is used they are not divided into boxes of different labor-saving lengths. Each border is kept standing on its feet so that the many different styles can readily be distinguished, and the various lengths are arranged in descending order.

There is no place in the world where order is so essential as in a printing shop. Everything must be returned to its proper place. Every piece of labor-saving material must be of the right length. Every piece of type must be in its own box and nowhere else. Orderliness and careful organization of materials is half the secret of efficiency in any print shop.

The newspaper man who understands this necessity for efficiency in the composing room will know better how to handle his work so that the production end of his business will not be slowed up because of his own inefficiency. He will handle his copy so that it will require as few changes as possible in the composing room and allow production to be kept up at the least cost and in the smoothest working order.

SUGGESTIONS FOR THE STUDENT

The newspaper man who would have an understanding of the mechanical problems involved in composing printed matter would do well to go out in the shop and try setting up some simple exercises.

*Exercise 1*

Get a stick and try setting it to different measures. Then practice holding it in the proper position for composition. Set the stick at 20 pica ems and get out a case of 10-point type. Set the following line:

eeeeeeeeeeeeeeeeeeeee

Distribute this line in the *e* box in the manner explained on page 92. Set and distribute a line of *h*'s and a line of *t*'s in the same manner. Then try combining these letters into the following line:

the the the the the the the the

*Exercise 2*

Try setting the following sentence which contains all the letters of the alphabet:

The quick brown fox jumps over the lazy dog.

Justify the first line and quad out the second until it justifies.

*Exercise 3*

Set the stick to 22 ems and set the following lines in 8-point type, using between words the space mentioned in each line. Start lines flush against the left-hand side of the stick, quad out at the end, and justify.

The use of 5-em spaces makes thinly spaced lines.

Four-em spaces should be used between these words.

Three-em spaces make for normal spacing.

Set this line by using 5-em and 4-em spaces.

This shows a line spaced with en quads.

When these five lines have been set and justified, remove from stick carefully, as explained on page 80, and proceed to tie up and take a proof of the exercise.

Read proof carefully, using proper proof marks, then correct and take a revised proof. When a correct proof has been secured, clean the type and distribute.

*Exercise 4*

Set stick to 18 ems and use again the case of 8-point. Set the following, using 8-point caps for the head and 8-point upper and lower case for the body. Center the head by putting an equal amount of quads and spaces on either side.

RULES FOR INDENTION

An em quad should be used for indenting paragraphs set 18 picas wide or less. For paragraphs set 18 to 30 picas wide use a 2-em quad for indention.

The wider the measure and the larger the type, the greater the indention that should be used.

Separate heading from body by two 6-point slugs and place one slug between paragraphs. Remove the exercise, tie up, and prove as in Exercise 3.

*Exercise 5*

Set stick at 20 ems and use 12-point type to set the two type forms below:

HANGING INDENTION

This indention is made by setting the first line the full width of the required measure and indenting at the beginning of each line one em, or more, if the measure be wide.

Remove and tie up before setting the second half:

Half Diamond Indention

This indention is made by gradually narrowing the lines. Care should be taken to indent evenly and the matter should end as nearly in a point as it is possible to set it

Prove, correct, and distribute.

## CHAPTER V

### SETTING TYPE BY MACHINE

WHILE knowledge of the principles of hand composition is fundamental to any understanding of typography, very little straight matter in either news columns or advertisements is now being set by hand. The invention of machines to do this work more economically and with much greater rapidity has revolutionized the printing business and has made possible the great newspapers with their tremendous volumes of advertising.

It is therefore absolutely essential that the newspaper worker become acquainted with these machines and learn just what they can and what they cannot do. Particularly is this important for the desk editor or copyreader, for every bit of news he edits and nearly all the headlines he writes will be machine set. He must know both the possibilities and limitations of his machines. There are many interesting typographic devices available on the composing machines, but not all are available on every machine. He must know what sizes he can call for on each machine, what faces are available; he must know when he can call for boldface and when he can use italic; he must know what kinds of rules and borders are at his command, what kinds of boxes his machines can produce. He should know how to make any changes that are necessary, so that he will cause the least possible amount of work and confusion.

#### EARLY TYPESETTING MACHINES

Before the invention of composing machines, newspapers were, of necessity, limited in size and in speed of production. The *New York World* had 210 compositors setting type by hand at high speed, but even then the *World* was very small compared to its present size. Smaller newspapers, which could not afford that many compositors, were limited to four- or eight-page folios. It

was impossible to set type enough to fill more pages, regardless of how much news there might be.

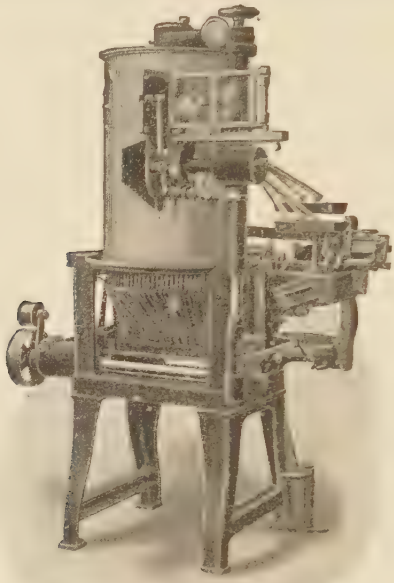
Inventors early tried to devise some machine to speed up the slow, tedious job of setting type by hand. It was not difficult to invent a machine with a number of little boxes or grooves, each holding its particular letter, which, when pressure on a key released a little gate, slid down into an assembling stick of some kind. But there was no way of justifying each line, of calling down from their boxes the proper combination of spaces to make each line the same width as the others. And then, once the type was down, there was no way of getting it back into the little boxes or grooves, except by putting it back by hand. A type-setting machine was not really of much practical use unless it did away with the slow, tedious job of distribution. It was not until 1870 that a machine was brought out which solved the distribution problem, but justification still had to be done by hand. These mechanical typesetters, nevertheless, did good service for newspapers during the period from 1853 to 1886. Some of the best known of these machines were the Rogers, the Thorne, and the Simplex. In some of these early machines, the distribution problem was avoided by simply melting up the type after it had been used and casting new sorts on a rotary type-casting machine.

### THE UNITYPE

The manufacturers of the Simplex, the Wood Nathan Company of New York, in 1870 brought out an improved machine called the Unitype, which was probably the best of all the typesetting machines. Unitypes, until a few years ago, were still to be found in some country weekly and small printing offices.

This machine consisted of two cylinders, one above and rotating on the other. Each cylinder had 90 vertical channels in which the type was held. The lower cylinder was the magazine from which the types were dropped as called for from the keyboard; the upper cylinder served as the distributor. Lines of dead matter, type that had already been printed from, were placed by hand in a short galley at the top of the machine. From there they were fed into the channels of the upper cylinder by an automatic loader. A sliding weight pressed each line down to the bottom of its channel.

As the upper cylinder rotated step by step above the lower one, it brought each channel in turn directly over each channel in the lower cylinder. At every step, the bottom type of the channel in the upper cylinder was tested against the "wards" of the channel just below it. Every bottom type, having a combina-



THE UNITYPE

tion of nicks matching the combination on the wards in the channel over which it stopped, would drop down into its proper channel, while those which did not match would be carried along until they found their proper places. Thus the problem of distribution was solved, but the operator of the machine still had to justify each line. Even so, the Unitype was an improvement over other typesetting machines. It was estimated that one Unitype could do the work of four hand compositors.

### INVENTION OF THE LINOTYPE

In 1876 Ottmar Mergenthaler, a German-American of Baltimore, began working on a new idea. He abandoned the idea of a machine that would set ready-cast foundry type and took up

the scheme of working out a machine that would cast new type in the order that the letters were called for. It took nine years of painstaking work before he perfected his idea. His machine was called the Linotype because it cast a solid line of type instead of separate letters.

Newspaper publishers, to whom Mergenthaler took his invention, at once saw its possibilities, and a group of them formed a company in 1885 to develop the machine. By July, 1886, they were ready to make their first installation. Whitelaw Reid, owner of the *New York Tribune*, was one of the officers of the company, and the first twelve linotypes were set up in the *Tribune* plant. Melville Stone, another of the officers of the company, secured the second installation of twelve machines for his *Chicago Daily News*. By 1890 the linotype had been so improved that it began to find a ready sale to newspapers throughout the country.

Today practically all the body type in newspapers, and a good many of the headlines as well, is set on the linotype or similar machines. Until a few years ago newspaper headlines and display advertisements still had to be set by hand, but the newer models of the linotype and its competitor, the intertype, have been perfected to set larger sizes of type and longer lines, while such a great variety of faces has been made available to users of these machines that most newspaper heads, except ribbons and banners, are now machine set. Special "ad" machines likewise set almost everything in display advertisements except special display heads, unless type faces are called for that are not available on the machines. Today a good linotype operator can set in one hour almost as much copy as a hand compositor could set in a day. Ottmar Mergenthaler and his linotype revolutionized the business of newspaper making.

### THE LINOTYPE MATRIX

The linotype is operated by a keyboard, and as its various keys are pressed, brass matrices bearing molds for the letters required, and space bands sufficient to fill out a line, are brought together in an assembly elevator or *stick*. The elevator then carries the line of *mats*, as they are called, into position in front of a slot-like mold in a casting wheel. Molten metal is pumped

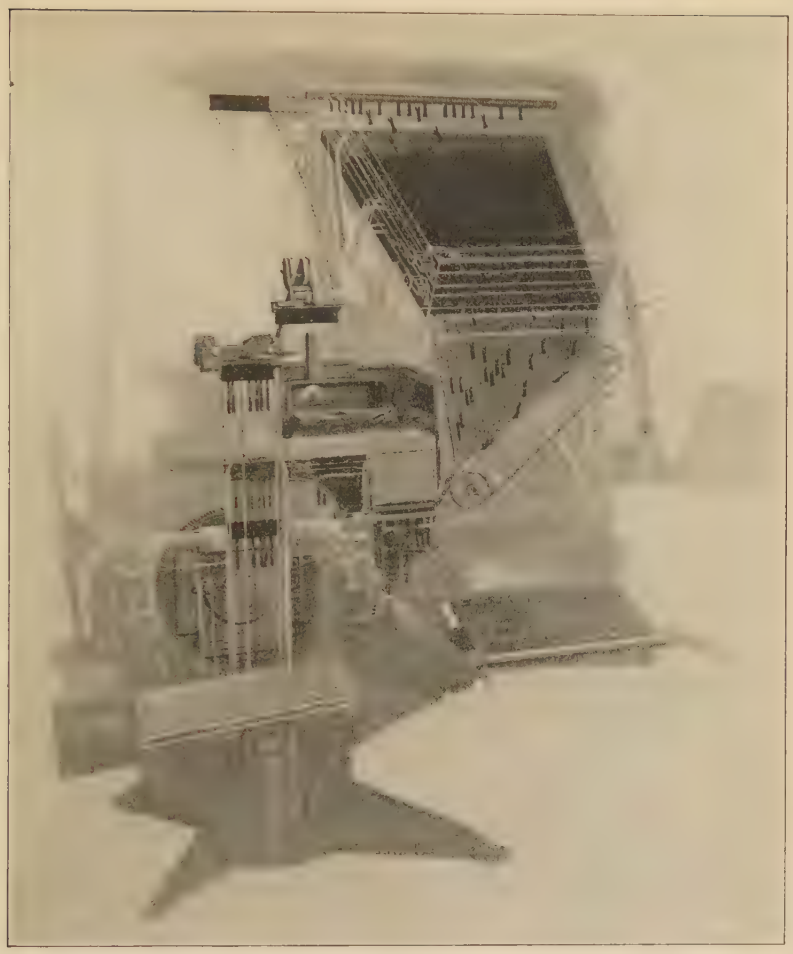
into this mold and against the face of the assembled line of matrices. The casting wheel then completes a revolution, during which the line of newly cast type is cooled, shaved, and trimmed, and finally is pushed out at the bottom as a completed linotype slug ready for printing.

The matrices are flat pieces of brass about 1¼ inches long by ¾ inch wide and varying in thickness according to the size of the type. One end of the matrix is cut away in the form of a triangular notch, inside of which are a series of little hooks or teeth to help in the distribution of the matrices, as will be

Linotype matrices

explained later. On the front edge of the matrix is stamped the letter mold. Usually there are two molds of the same letter on each matrix, one above the other; one is the regular lightface, while the other may be boldface or perhaps the italic of the same letter.

These matrices, of which there are a considerable number for each letter, are stored in a flat magazine at the top of the machine, resting in an inclined position above the keyboard. For each letter there is a long narrow channel running from top to bottom of the magazine. When the operator presses the letter *a* on the keyboard, a matrix for that letter is released from the



THIS PHANTOM ILLUSTRATION SHOWS EACH STAGE OF THE CIRCULATION OF THE MATRICES THROUGH THE LINOTYPE

bottom of its channel by the opening of a little gate. It drops by gravity down one of the series of assembling channels just below the magazine, which converge on a small leather conveyer belt moving toward the left. This belt carries the matrix to its place in the line of matrices that is being brought together in the assembly elevator just above and to the left of the linotype keyboard.

### THE SPACE BANDS

For spaces between words, pressure on the keyboard space-bar brings into position a long, thin, wedge-shaped piece of steel called a *space band.* It is in fact made of two thin wedges sliding upon each other, a short one with the point down, and a longer one with the point up. Just before the line is to be cast, a bar comes up from beneath and pushes these wedges against each other, expanding their width to take up all the extra space in the line, and thus justifying it perfectly. Mergenthaler's solution of the knotty problem of justification is one of the simplest and yet one of the most ingenious parts of the whole machine.

The space bands hang in position in a little box just above and to the right of the assembly chamber so that they can slide into position between the matrices as called for.

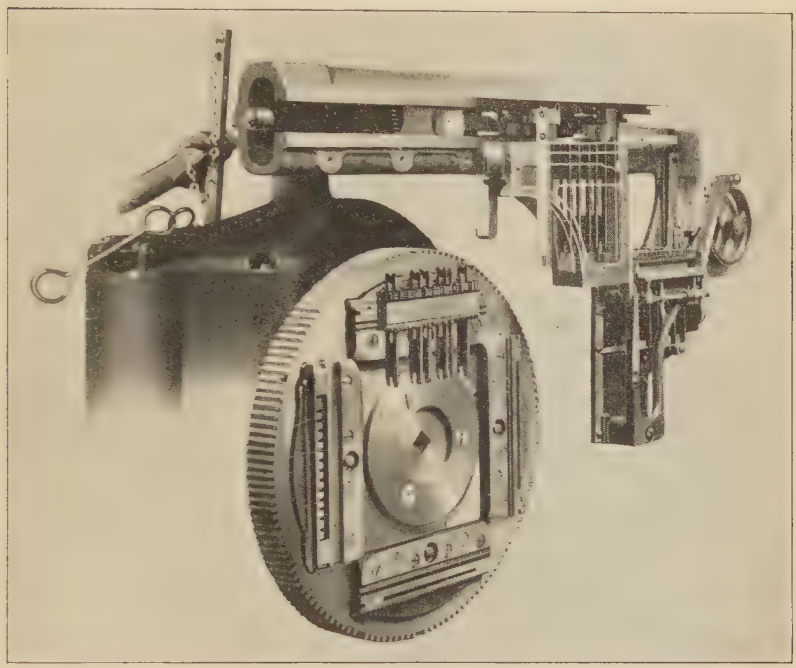
### CASTING THE SLUG

As the successive matrices reach their place in the stick, they hang side by side with their type molds in a horizontal line facing the back. The space bands hang loosely between the matrices that compose the words on each side. When enough matrices and space bands have been assembled to fill one line, the operator moves a lever and the machine automatically completes the rest of the operation by itself while the operator goes on setting the next line.

At the movement of the lever, the assembly elevator with its line of matrices is moved up, then across to the left, and lowered into position in front of the horizontal casting mold in the casting or mold wheel. This mold is really only a horizontal slot in the wheel, open at front and back and of the exact size of the line slug that is to be cast. As the matrices are brought into place it will be noted that the line of letter molds cut into their front edges is exactly opposite the front of the casting mold. A rod now comes up from below, as has been explained, and pushes against the space bands to justify the line and make it completely cover the front opening of the casting box.

Back of the mold wheel is the metal pot containing the molten metal that is heated by gas or electricity. This whole metal pot now moves forward so that the mouthpiece of the pot comes in

contact with the rear of the mold. The pot plunger descends and forces the molten metal into the mold and against the inner edges of the assembled matrices. The metal fills out the letter molds of the line, and thus the slug is cast.



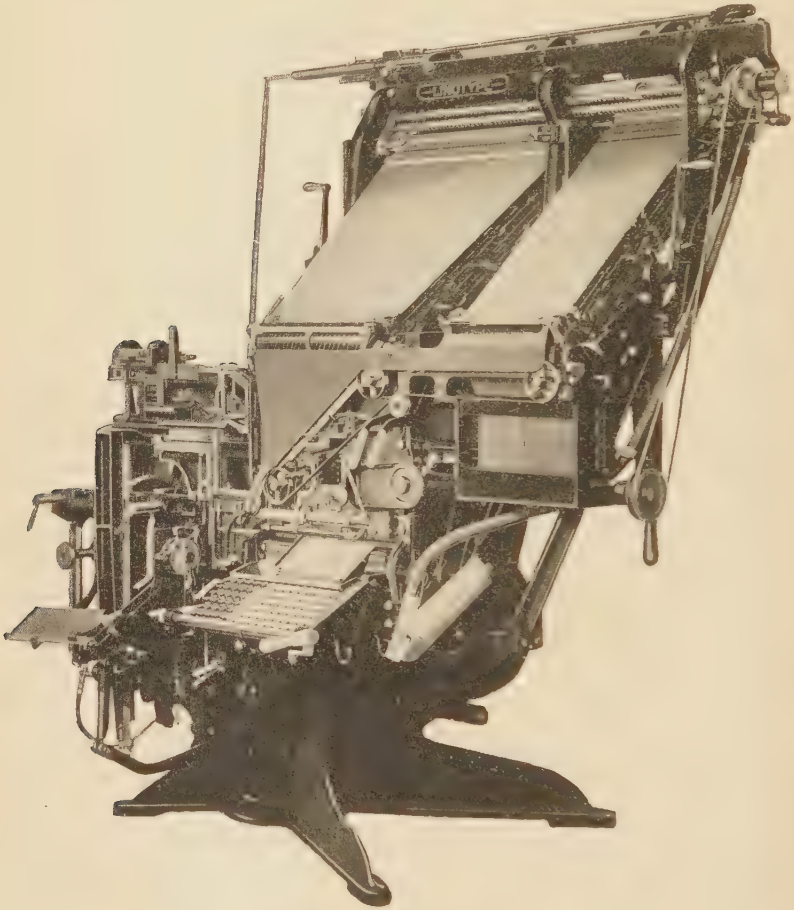
MATRICES AND SPACE BANDS IN POSITION FOR CASTING

The mold wheel starts turning to the left, and a knife trims the bottom of the slug to make it exactly type high. As the wheel turns, the slug cools and hardens. Other knives trim the slug to proper point thickness, and at the end of a three-quarters revolution the finished slug is ejected from the mold into the receiving galley.

### DISTRIBUTING THE MATRICES

Meanwhile the metal pot has moved back to its normal position, and the casting elevator has lifted the line of matrices up to a point at which a long arm from the back of the machine can reach down and pick up the matrices. As this is done the space bands drop out and slip into their own compartment where they

hang in line ready to drop into place when called for. The long arm or *second elevator,* as it is called, raises the matrices to the top of the machine, where they are pushed into the distributor box and from there out on the distributor bar. This bar has a



A NEW MODEL LINOTYPE

number of horizontal grooves from which the matrices hang by the little teeth projecting inside their V-shaped notches. The mats are carried forward on this bar by three slowly revolving worm screws. Each matrix has its own combination of hooks or teeth. The matrix for the letter *g,* for instance, travels along a

different set of grooves from that of the *a* matrix. This *key-way* for each matrix ends when it arrives directly over its own channel in the magazine. There the grooves, from which its combination of teeth have been suspended, are broken, and the matrix drops from the bar and slides into its proper channel, ready to be used again.

The speed with which the linotype is operated is made possible because almost all of its operations are automatic. The operator simply keeps the motor running, the metal hot, presses the proper keys, works the lever at the end of each line, and the machine does all the rest. While the operator is assembling one line of matrices in the stick, another line is being cast in the mold wheel and still a third is being distributed at the top of the machine. Should the operator make an error in striking his keys he can easily make corrections in the stick, if he notices it before the line has gone to the casting wheel. The matrices and space bands hang loosely in the stick, and he can easily transpose or change matrices by hand. After the line has been cast, however, corrections can only be made by resetting and recasting the whole line.

The linotype is particularly adapted to newspaper work, for the slugs can be handled so much more easily than lines of individual pieces of type. Fifty or more slugs can be lifted by hand at one time. The slugs can be moved about without any danger of pieing, and there is of course no danger of individual characters falling out. When the slugs have been used for printing, there is no problem of distribution, for the slugs are merely returned to the melting pot to make metal for new lines.

### MULTIPLE MAGAZINE MACHINES

The old style of linotype contained but one magazine and could make slugs of but one size of type. True, the size of the slug might be changed by enlarging the slot in the mold wheel, so that the operator for instance might have 7-point type set on an 8-point slug. Also the fact that each matrix bore two molds of the same letter, one lightface and the other bold or italic, made it possible to set the two faces in the same line. A simple adjustment device on the machine brought whichever mold desired into line. But this was all the variety that was possible with one

magazine. Hence there were 7-point machines, 10-point machines, and so on, each limited by the one magazine that it carried.

The next development was to provide additional magazines for each machine. They were hung on racks near the operator and could be substituted for the regular magazine by simply lifting out the old one and clamping a new one into place. To facilitate the change from one set of mats to another it was necessary to develop also a more easily adjustable casting mold.

Then came multiple magazine machines with two, three, or four magazines superimposed above each other. These machines are equipped with four-slot mold wheels. Any of the magazines may be instantly brought into use through a turn of the handwheel convenient to the keyboard. The escapements of all four magazines are actuated by a single series of escapement rods. Shifting a handwheel at the right of the keyboard raises or lowers the escapement rods to connect their upper ends with the escapements of any of the magazines as required. Thus the operator has at his command, through the 90 keys on his keyboard, four different sizes of type and eight different faces, since there are two molds on each matrix, or a total of 720 characters. As all the magazines are interchangeable and may be quickly removed and replaced by others, a supply of extra magazines with different sizes and faces will make the four-magazine linotype a self-contained jobbing office or ad-composing department in itself. One operator can, for instance, set at continuous operation the large news heads, subheads, body matter, and display figures.

Still later models are equipped with auxiliary magazines mounted to the right of the main magazines and instantly brought into play by the operation of an auxiliary keyboard, giving the operator a still greater variety of faces and sizes at his command.

Recently display machines have been brought out that set display lines just as straight matter is set on a standard linotype. The display magazine is half the length of the standard magazine and has 72 channels instead of 90. The channels are spaced far enough apart to accommodate the large display matrices. To change from one face and body to another the operator simply lifts the short, light magazine from the frame and places it on a revolving magazine rack within arm-length of his chair, then replaces it with the magazine desired. The entire operation,

including change in body size of slug, takes less than 30 seconds. Developments in composing machines are rapidly eliminating hand composition in newspaper composing rooms.

### POSSIBILITIES OF EACH MACHINE

Because of the speed with which newspapers are put out, however, single machines are seldom used for several kinds of composition. Instead there is a careful division of labor in most newspaper composing rooms; certain machines are assigned to the setting of straight matter, others may be used as "head" machines, still others may do nothing but advertising display work.

It is necessary, therefore, for the editor to familiarize himself with the different sizes and styles of type that are available on each machine. Matrices on the straight news machines, for example, usually carry one mold for the Roman or ordinary body type of the letter and another mold that is boldface. The editor, then, can feel free to call for boldface whenever he wishes to give added emphasis to a lead paragraph or other important passage, but he will not call for italics or small caps during rush hours, for that may involve changing to another magazine.

Smaller headlines in 7- and 8-point boldface caps or caps and lower case are often set on the same machine as the news stories that they accompany. Subheads also are set on the same machine, for they are usually the boldface of the regular type. The editor therefore can send down such small heads written on the same piece of paper as the story, but all larger heads should be sent down on separate sheets and should be carefully slugged, for they go to a different machine.

A knowledge of what difficulties are encountered in changing to different magazines and of the changes that are possible with the least confusion will enable the editor to get much better cooperation from the composing room and will go a long way toward preserving the smooth running of the production departments.

### THE INTERTYPE

Since the expiration of the basic patents on the linotype, new machines on the same general principle as the linotype, but with various improvements, have appeared.

The principal competitor of the linotype is the intertype. It has fewer parts than the former and is somewhat simpler in design. Instead of putting out different models, the intertype is built on the idea of a standardized unit to which the printer can add extra magazines and equipment as he is able.

As with the linotype, the makers of the intertype have made great advances in increasing the productive capacity of their machine through the development of multiple magazines and side magazines. A completely equipped machine can have as many as three or four main magazines and three side magazines with a capacity of more than 5,000 different characters and twelve different faces and with a range of sizes from 5 to 60 points, all at the immediate call of the operator. The intertype also has increased the possible width of the slug line to 42 ems, a valuable aid in setting display matter.

Although a newcomer in the field, the intertype has made rapid strides. It is to be found today in the composing rooms of many newspapers. It is taking its place beside the linotype as an important factor in newspaper production.

### THE LINOGRAPH

Another line-casting machine which has found favor particularly in smaller newspaper and printing plants is the linograph. It is simpler and more compact than either of the other two machines and sells for about half the price. It is a one-magazine machine, but additional magazines can be purchased as desired and changes from one magazine to another can be made in a few seconds.

### THE TELETYPESETTER

A new invention announced late in 1928 by Frank E. Gannett, president of the Gannett newspapers, and Walter Morey, mechanical superintendent of the Gannett newspapers, is a machine which sets telegraphic news on either linotype or intertype as it comes off the wire. The idea was first conceived by Mr. Morey and developed and perfected with the aid of engineers of the Morkrum-Kleinschmidt corporation.

The teletypesetter, as it is called, represents an extension of the telegraph-printer machines now being used by the press

associations for the transmission and reception of their services. Instead of stopping with the translation of the telegraphic code into typewritten copy in the editorial room, the new invention carries the electrical impulses direct to the typesetting machine, where the telegraphic copy is turned at once into linotype slugs ready for printing. The teletypesetter itself is not a typesetting machine but automatically operates such a machine.

The copy comes in on a tape, with Roman letters printed over the code perforations. At a tape-editing desk in the editorial room, telegraph editors correct the copy and edit as they see fit, piecing the tape together much as it is done in mending motion picture films, or, if extensive changes have to be made, reperforating machines are provided. The tape then passes through the transmitting distributor, which changes the code into electrical impulses which operate the typesetting machine.

The inventors declare that with the aid of the teletypesetter it will be possible to set matter twice as fast as with human operators and that one man will be able to look after four machines.

The invention is revolutionary, but its backers vision the day when not only all telegraph and cable news will be translated into linotype matter as fast as it comes in, but all local news as well; for reporters, instead of turning to their typewriters, will sit down to perforating machines to prepare tape for electrical composition.

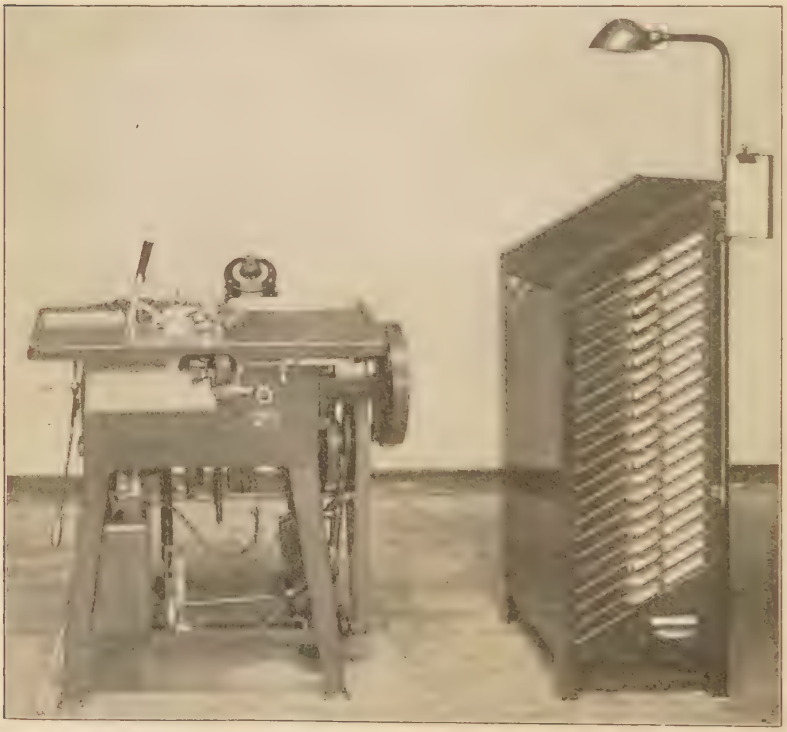
### THE LUDLOW TYPOGRAPH

A recent addition to composing room equipment is the Ludlow Typograph brought out first by the linotype company but now produced by its own firm. The Ludlow Typograph is designed to supply type in slugs for advertising display lines, large news headlines, and other matter which heretofore has been set most effectively and economically by hand. Brass matrices are set by hand in a special stick. The assembled mats are then placed over a slot in a special steel table, molten metal is forced up from beneath, and the result is a line cast as a single slug which can be handled much more easily than separate pieces of type. Besides, it gives a new, clean-cut type face for each printing.

After the slug is cast the matrices must be distributed by hand, but this can be done while the next line is being cast and takes no longer, at any rate, than distributing individual type. It does

TYPOGRAPH STICK AND MATRICES

away with the need of keeping on hand a large supply of foundry type in display sizes. It makes possible a wide choice of type faces without tying up valuable composing room space with type cases and thousands of pounds of metal in loose types.



LUDLOW TYPOGRAPH CASTING MACHINE AND MATRIX CASES

The typograph will cast a face as high as 60-point on a 12-point slug, the overhang being built up with blank leads and slugs underneath. It will cast a line of any desired length up to 112½ pica ems—eight full-width newspaper columns.

The improved results of printing from new faces and the economy in space made possible have made this machine popular particularly in larger plants where composing room space is at a premium. The Ludlow Typograph is rapidly finding its way into composing rooms all over the country.

### THE MONOTYPE

Another composing machine that plays a large part in printing today is the Lanston Monotype. There are a few newspapers that are monotype set, but, as will be apparent after the explanation of this machine, it is not as practical for newspaper work as either the linotype or the intertype. It is, however, used to a large extent in the printing of magazines, books, and in commercial printing of all kinds. Almost every newspaper plant of any size has at least one monotype caster to cast up "sorts" of display types, leads, slugs, rules and other materials needed in every composing room.

It is called the monotype because it casts single letters. The machine was invented by an American, Tolbert Lanston, in 1887. It consists really of two machines; one known as the *keyboard* and the other as the *caster.*

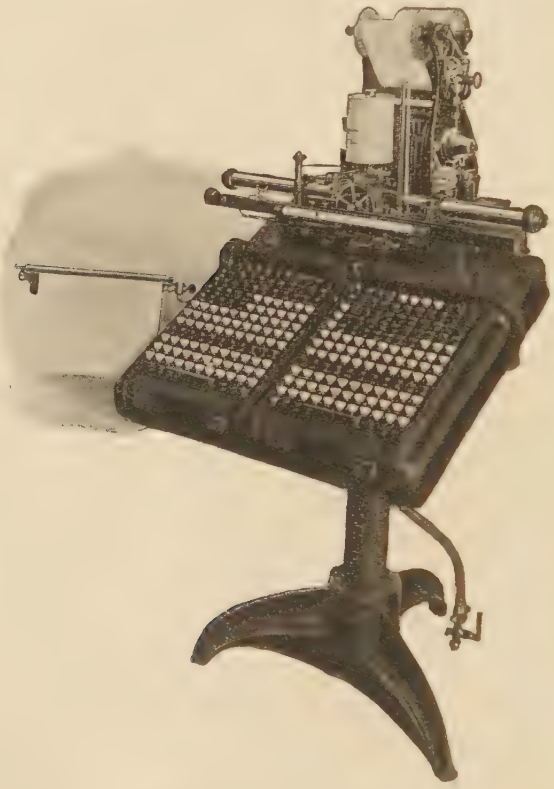
The keyboard is usually placed in a quiet room away from the noise of the composing room. The operator types off his copy on the keyboard much as he would on a typewriter, but instead of producing letters, each key struck produces a pair of holes in a paper ribbon much like a miniature player piano roll. The machine is run by compressed air which revolves the roll and operates the combination of punches controlled by the keyboard.

### THE MONOTYPE UNIT SYSTEM

To understand the operation of the monotype it is necessary to know something of the monotype unit system. The unit in monotype composition is one-eighteenth of the capital *M* of the particular font being set. Thus capital *M* and *W* are 18-unit

characters, while the small *a* or *g* are 9-unit characters and an *f* or *j* are 6-unit characters.

Now different faces have different widths, so that the operator, when he is about to begin composition, must consult his chart to see how many units in the type face selected the width of the line that he intends to set will hold. Then he sets the scale above

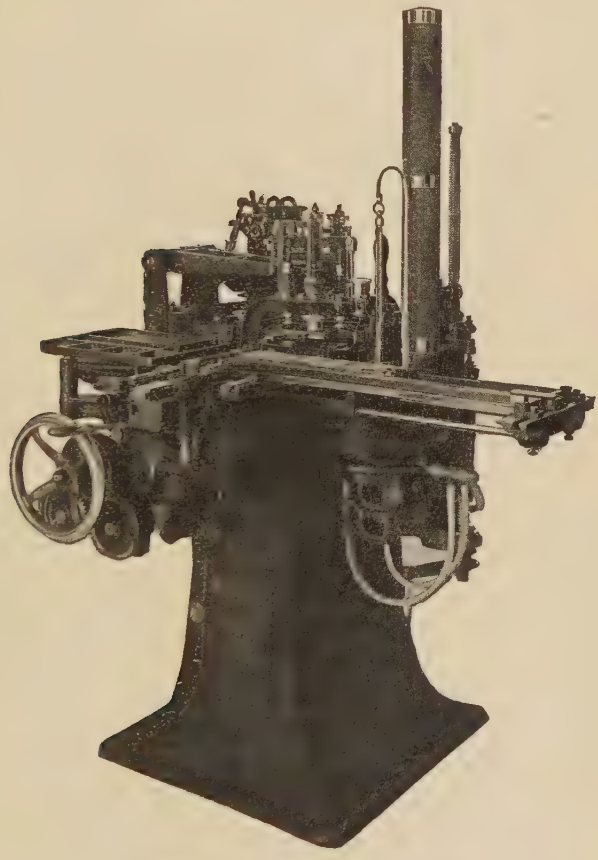


MONOTYPE KEYBOARD

his keyboard to that number of units. Every time he strikes a key an indicator on this scale moves to the right the number of units required by the letter struck, and when the operator nears the capacity of his line a bell rings just as on a typewriter. This indicates that there is not sufficient space left to set any more words and that the line must now be justified.

Justification is made possible through a little cylindrical device

above the indicator called a justifying scale. As the operator sets his line he calls for a normal space between each word, and each time he touches the space bar on his keyboard the pointer moves up one step on the cylindrical scale. This cylinder also keeps track of the number of units called for in each letter set. When



MONOTYPE CASTING MACHINE

the line is ready to be justified the cylinder is released; it revolves rapidly, and when it comes to a stop the indicator points to two numbers which represent the number of normal spaces between words and the amount of space left over which must be divided among these intervals and added to each normal space to completely justify the line. The operator quickly notes these

numbers and punches the keys for the numbers indicated in the double row of red keys across the top of the keyboard. These keys punch two holes in the ribbon at the end of the type line.

When the ribbon is fed into the casting machine, however, it enters in reverse, so that the justifying holes come first and set the space-setting mechanism of the caster to produce spaces of uniform width between all the words of that line. This is done by a pair of accurate wedges which, when set in the position called for by the justification holes on the ribbon, add the required amount to the normal space. Once set, every space in that line will emerge from the caster exactly the same width, and the line will be perfectly justified.

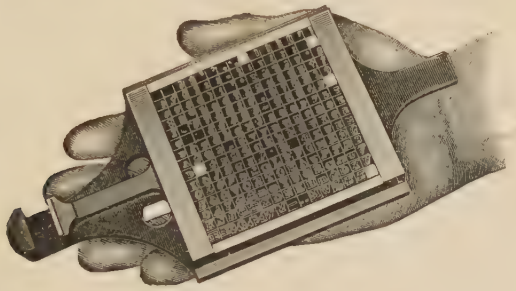
### THE CASTER

The caster is an almost human machine. It has a stationary casting box to serve as the mold for the shank or body of the type, and above it there is a device known as the *matrix grid* which contains the various letter molds and which is shuffled back and forth over the casting box to bring first one letter and then another into position over it.

The matrix grid is a little metal plate about four inches square ruled off on one side like a miniature checker board into 225 squares. Each square contains the mold of a different letter or character. There are fifteen rows of fifteen characters each, and all the characters in each row are of the same unit width. Thus all the letters of the same width as the small *a* are in one of the 9-unit rows. When the matrix grid moves so that it brings one of the letter molds in an 18-unit row over the casting box, the mold automatically opens to that width; when a 6-unit character comes into position, the mold narrows to conform to its width, and so on.

This grid is shuffled about over the casting box by a series of levers which give it motion in two directions, backwards and forwards, and right and left. The movements of these levers are controlled by the perforations in the ribbon that were punched out on the keyboard machine. As this roll is fed into the machine it passes over a cylinder in which there is a row of little openings into compressed air tubes. For each letter, it will be remembered, there are two holes in the paper ribbon. As these holes come over

their respective tubes in the cylinder, the air escapes. This releases springs governing the levers that give the grid a combined motion in two directions, so that the mold for the desired letter comes down over the casting box and at the same time sets the size of the mold to suit the width of the letter.



MONOTYPE MATRIX GRID

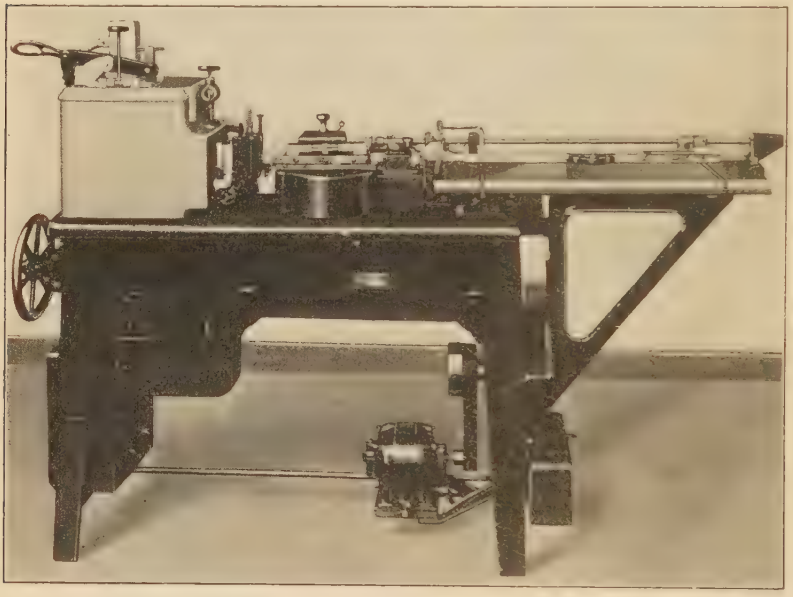
Immediately a plunger forces a jet of molten metal from the pot underneath up into the casting box to fill out the letter mold on top. Water circulating through tiny holes in the casting box cools the metal and hardens it instantly. As the matrix grid shuttles into position for the next letter, the mold box cuts off the base of the letter evenly, pushes the finished type out into its place in the line, and with a return motion kicks the excess metal that it has cut off back into the melting pot.

All this takes place so quickly that the eye can hardly follow the various operations, for the monotype casts and sets type at the rate of 150 to 180 types a minute. As each line is completed a little carriage moves the line out into the galley and pushes it up against the preceding line. Each line is exactly of the same length, for it was perfectly justified by the space-setting mechanism explained above. When the type has been printed from, it is melted up, so that there is no problem of distribution. The monotype casts new type for each printing job.

### USES OF THE MONOTYPE

The newspaper man will probably meet the monotype first in the form of the *materials machine* found in most composing rooms. This is only the caster part of the monotype, equipped with a special attachment so that it can cast borders, rules, leads,

and slugs for which there is always a demand. This machine can be fitted with individual letter matrices instead of a regular matrix grid and can be set to cast any quantity desired of sorts for depleted type cases. A great many newspapers keep one man and a caster or two busy all the time replenishing cases and slug and rule racks. It is to the advantage of a newspaper to have a good assortment of new, unbattered borders, rules, and slugs always on hand. Other materials machines found in many newspaper offices are the Thompson caster and the Elrod, both of which operate on somewhat the same principle.



THE NEW ELECTRIC ELROD LEAD, RULE, AND SLUG CASTER

The new electric Elrod supplies leads and slugs up to 18-point and plain or parallel rule combinations up to the same size. The material it produces is practically a continuous cast, free from brittle welds or air holes so that it can be bent into a full circle without breaking. Its electrical operation also offers decided advantages in ease and speed of production.

The reason that the monotype is not as practical for setting regular news matter as the linotype or intertype should be evident from this description of how the monotype works. For one thing, the monotype requires two operations, which doubles the

time; then the ribbon must be fed into the caster backwards, which makes it difficult to divide copy into short takes as is usually done with news stories in order to speed up composition. And finally, monotype matter is made up of single pieces of type which are much more difficult to handle than linotype slugs. Pages can be made up very rapidly with slugs, but it takes more time and care to make up a page of individual pieces of type.

The advertiser, however, will have many occasions to make use of monotype composition, for it has many advantages for the printing of advertising booklets, folders, magazines, books, and commercial work in general. The type is always new and fresh and does a cleaner, better printing job. Then the monotype makes possible a greater variety of faces and sizes of type. All that is necessary to change the face or size is to insert a new matrix grid in the caster. The change requires only a moment, and a printing office can have as large a variety of grids as is desired. Many larger advertisers, in fact, have their advertisements set up by monotype to get the type faces and layout they wish and then furnish the newspaper with an electrotype or mat of the advertisement rather than trust to the speed with which ads are set up and thrown together in newspaper ad alleys.

Another advantage particularly applicable to book composition is that the perforated paper rolls can be stored away for any length of time and can be used over and over, thus saving the expense of composition for later editions. Errors are just as easily corrected in monotype composition as in hand-set matter. The individual letters can be changed or transposed by hand without recasting the whole line as must be done with linotype matter.

### TYPESETTING MACHINES IN THE NEWSPAPER PLANT

No newspaper composing room today is complete without its composing room equipment. Weekly newspapers usually have one or two linotypes or intertypes. Small daily papers need four or five and sometimes as many as ten; metropolitan papers have batteries of 50 or more machines. When it is considered that linotypes and intertypes cost from $3,000 to $4,500 and that extra magazines cost $75 to $150 each, it is readily apparent that composing machine equipment represents a considerable investment in any newspaper office.

While some hand composition is still necessary in almost every newspaper composing room and printing plant, the developments in composing machines are rapidly eliminating hand work except in the making up of type forms. Composition has been speeded up tremendously and distribution is being done away with entirely. The removal of mechanical limitations is opening up new possibilities in newspaper and printing production.

The inventions of Ottmar Mergenthaler and Tolbert Lanston are rightfully credited as among the greatest of our time, for their composing machines have revolutionized newspaper making and the whole printing industry.

### SUGGESTIONS FOR THE STUDENT

To get a clearer idea of how linotypes, intertypes, typographs, and monotypes operate, students should visit local printing offices to see these machines in actual operation. The operators usually will be glad to explain their machines. Trace their operations through every step of the process of turning out completed types or line slugs.

## CHAPTER VI

### TYPE FACES AND HOW TO USE THEM

NEWSPAPERS today are giving increasing attention to the physical appearance and readability of their pages. Time was when no thought was given to type dress. The editorial staff turned out the copy and the mechanical staff turned out the paper in the quickest time possible.

But competition for readers has forced newspaper editors to a serious study of how type can be used to make pages interesting and attractive. They have found that the advertisers were years ahead of them in matters of typography. Forced by competition with others, the ad men long ago discovered that there was no use in spending money for valuable space unless people could be induced to read the advertisements. They were compelled, therefore, to study type faces in order to ascertain which are most pleasing to readers and most effective in different kinds of advertisements. They worked out interesting methods of display to attract the attention of readers. They came to the conclusion that first of all an advertisement must be easy to read if it is to attract rather than repel readers.

Gradually newspaper editors are coming to realize that these principles hold for the news columns as well. True, ever since the Civil War they had recognized the advertising value of display headlines in calling attention to the news, but they had given no thought to how they were displayed. Their only interest in type had been to use the most condensed or extra condensed variety available in order to get the maximum number of units into their headlines.

Newspaper headlines have been anything but attractive. Many of them are still veritable eyestrains. But editors are beginning to investigate the possibility of borrowing a leaf from the advertiser's book and of using type faces that are not only easier to read but that have more character and intrinsic interest value as well.

Even the editor-in-chief, secluded in his sanctum, has begun to wonder if there is any use in writing thunderous editorials if they are dressed in a dull, drab grayness which no one will want to read. In the last few years there has been a decided move toward the emancipation of the editorial from its typographic shackles.

More potent than any other influence, perhaps, has been the fact that the large national advertisers, themselves pioneers in good typography, have been showing a decided preference for newspapers that have dressed up their pages and made them look more live and interesting.

### WHAT TYPE FACE TO USE?

That is a question that worries the newspaper man. The advertisers have given much thought and study to the question, for they realize that much of the effectiveness of any advertisement is dependent on its type dress, that, in fact, each type face suggests in its very form a certain character and atmosphere.

But the average newspaper man finds himself confronted with an almost hopeless task when he discovers the hundreds of type faces available. It is not necessary, however, to learn more than a few of the best faces. A research study recently completed at the University of Wisconsin, covering 59 magazines and 89 newspapers, and a parallel investigation directed at leading printers, advertising typographers, and advertising agencies disclosed that 23 type faces are apparently doing 88 per cent of the printing work in this country today.[1] And only a few of those are adaptable to newspaper work. Hence, if the newspaper man can learn to work with a few faces, he will have tools at his command to accomplish almost any typographic purpose.

How shall one learn to know types? Just as one learns to distinguish one's friends—by their facial characteristics, their complexion, and their clothes. To be sure, one does not often stop to analyze the faces of one's friends, to note the particularly high forehead of one, the prominent cheek bones of another, the upturned nose and receding chin of a third. One takes in all of these features at a glance and remembers the face as a whole.

[1] Ellis G. Fulton, University of Wisconsin Baccalaureate Thesis in Journalism, 1927.

But we are accustomed to look at faces of people and to tell them apart. A printer who has lived with types and learned to know them by long association can recognize type faces just as easily.

But for the beginner it is necessary to analyze carefully the individual characteristics of each type face, to study the differences in serif formation, to observe the degrees of shading between heavy and light elements, to find individual letters whose formation is peculiar to each type face. Such a study will reveal certain distinguishing features to serve as identifying marks for the beginner. As he grows more familiar with these faces he will become less and less dependent upon these marks and in time will be able to recognize each face at first glance as an old friend.

It will be the purpose of this chapter to introduce only a few of the faces particularly adapted to newspaper work and to show how they may be readily identified. To learn when and how this handful of good faces should be used there is no better way than to observe how they are employed by the best typographers. The student who wishes to acquire a working knowledge of these faces can do nothing better than to study the advertisements which appear to him most effective in both newspapers and magazines. He will find the secret of their effectiveness often in the kind of types used and the manner in which they are arranged in display. Because the key to the use of these faces is often best exemplified by the advertising appeals with which they are employed, the character of each of the faces discussed in this chapter will be explained by its advertising uses, and in the following chapter their adaptation to newspaper uses will be taken up in detail.

### ROMANS ARE BEST FOR THE NEWSPAPER

The division of types into Black Letter, Script, Gothic, and Roman races was explained in a previous chapter. The newspaper worker is principally interested in the Romans. Script is almost never used in newspaper work because its fine lines do not show up well on newsprint and are easily broken down in mat making. When there is need of a lighter, more free-flowing type, some form of italic is more practical for newspaper work. There are, however, occasional opportunities when Black Letter faces can

be used to advantage, and it is well to know how to handle them. Gothics, of course, are still strongly entrenched in newspaper headlines, and some of their principal varieties will be explained. But the faces that hold most promise for the improvement of American newspaper typography are in the Roman race.

### BLACK LETTER FACES

The Black Letter or Text faces are known to most people through their use on Christmas greetings and in holiday printing. They are very black and exceedingly fancy and elaborate in design. They are distinguished by the many sharp angles that occur in the formation of each letter, as shown in the example below:

Some Rare Manuscripts Exhibited

This face is very distinctive, and the student will have no trouble in recognizing it. He will often hear it called Old English by printers and advertisers alike, but this is the name of but one of the families within the Black Letter race and should not be applied to the race as a whole.

This was the type of hand lettering in vogue in Germany when Gutenberg began printing, and his types were therefore modeled after the Black Letter. It was the type of face used by most of the printing pioneers in Germany, France, and England.

### USES OF BLACK LETTER

Today Black Letter or Text types are used sparingly. A single line of Text type is frequently used to excellent advantage in contrast with a Roman piece of composition. Only a touch of decorative Text, however, can be used at one time or the effect will be destroyed by appearing overdone.[2]

Many newspapers set their nameplate at the top of their first page and the masthead on the editorial page in Text in order to dress up these pages. Occasionally the signature cuts of advertisers are set in Text. This is found most frequently during December when many advertisements have signatures and often

[2] J. L. Frazier, *Modern Type Display*, p. 28.

a single line headline set in Text in order to breathe something of the spirit of Christmas into their message.

A few newspapers use a single line of Text over their Saturday church pages. Text faces are the logical ones to use in display lines of church advertising, on church programs, or any other printing of an ecclesiastical nature. That is where they appear best, for they had their origin in the church and seem to belong with material of a religious nature. Text was the letter used when only books connected with the church were produced. It is, moreover, a serious sort of letter—it seems to portray the feeling of those monks who made their art a life-time labor of love and who dedicated their endeavors in a spirit akin to worship.[3]

There are many varieties of Text type. Some of the better known display forms are Cloister Black, Church Text, Chaucer, Missal, Cathedral, and Old English. One's choice will usually have to be governed by what is available in the printer's cases. Since Text faces are used so sparingly, few printers carry more than one or at most two faces of this type.

### GOTHIC TYPES

Some early American printer misnamed the block letter faces Gothic, and the name has stuck. The German term, *block letter,* is much more fitting. In other European countries it is called Grotesque or Sans Serif. But everywhere in this country it is called Gothic, and the student, to avoid confusion, had best abide by American custom.

Gothic types were evolved in imitation of the classical Greek and Roman lapidary characters found in inscriptions on stone or on stamps and coins. They represent the crudest of all styles of lettering; there are no serifs; the curves and angles are all very regular and there is no variation in width of stroke.

The only advantage of Gothic faces is their simplicity and boldness, but type faces are liked better when they suggest something of the human quality of imperfection. In their bolder forms, Gothics do suggest strength. There is something sturdy and masculine about them. But there is neither beauty nor life in these faces. Their letter-forms look dead and wooden. There

[3] J. L. Frazier, *Type Lore,* p. 31.

are plenty of other boldfaces, such as Goudy, Cooper, Cloister, and Caslon Bold, which possess as much strength and far more character and interest. The Gothics are dull ugly fellows—plain truckhorse types. Their plain block character can be seen in the following example.

**Crowns Repaired**

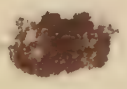
Like the severe mission furniture of a generation ago, the Gothics, until a short time ago, apparently had had their day. They were little used by advertisers except in the cheap bargain type of advertisement. The merchant who ran a sale every month and felt that to get customers in he had to fairly knock them down with a smashing attack of black ink and bold types used Gothics. They had come to be the earmark of the cheap store, and because of their overdisplay they gave an effect of exaggeration which made the reader doubt the sincerity of the values offered. Some papers had even barred heavy Gothics from their advertising columns.

But with the upswing of modernism in typography during recent years and in the desire of advertisers for black types with a punch there has been a revival of Gothic. Extreme modernists have been striving for effects with explosions of type and triangles, uncouth and almost illegible lettering, meaningless design. Gothics in new and strange forms have come back. Advertisers have seized upon them because they are different from the usual Roman composition. It is probable that this extreme modernism will prove only a passing phase. Typography has been through such experiences before and always there has been a return to the faces and designs that represent the best in typography. It is not likely that the vogue for straight lines and sharp angles can long continue without proving tiresome. The line of beauty and attraction is always the curve. In fact, the two new Gothics which are proving most popular, Kabel and Futura, are decided departures from the old-fashioned Gothic. While sans serif in form, they are different in spirit, lighter and more graceful; the sharp angles have been mellowed by suggestions of curves; the letters have been opened up and made more legible.

But Gothics even at their best can never be as good for all-round legibility and attractiveness as the best Romans.

The old-fashioned Gothics are making their last stand in the newspapers—particularly in the news headlines. Now a plain Gothic capital headline, if not too condensed, is fairly easy to read, though it lacks all suggestion of interest. But most papers using Gothic headlines have adopted some extra condensed variety that is exceedingly hard to read.

BEAT BOULDER DAM IN 31 HOUR SENATE BATTLE



HOOVER'S PLANS FOR CAMPAIGN WORRYING AIDES

Eastern Chiefs Insist He Must Make Extensive

Compare the two headlines above. The News Gothic at the top is fairly legible, but the narrow, condensed American Gothic at the bottom is impossible. The only advantage of such headlines is that they permit a large number of units to the line and so

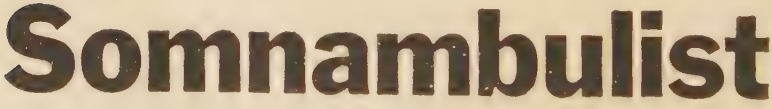
make headline writing easier. Their continued use in newspapers is largely a matter of habit, but many papers are breaking away and are adopting more interesting Roman type faces such as Bodoni, Cheltenham, Caslon, Century, and Cloister to make their pages more attractive and their head lines more easy to read.

### KINDS OF GOTHIC

Since it is quite possible that the student may have to work on a newspaper that still uses Gothics, it may be well to explain the differences between some of the varieties in most common use.

For banner headlines the heavy, black Railroad Gothic is most frequently used. This is a true block letter; all strokes are regular and terminate in a squared-off horizontal line. Endings of curved letters are pulled together, permitting little light between the heavy elements. Study these characteristics in the example below.

The Franklin Gothic used for both ribbons and smaller headlines is lighter in weight and more clean cut. Observe that the endings of strokes in looped letters are not cut off in a horizontal line but rather at an angle directly across the stroke itself, thus opening up the letters a bit.




The News Gothic is a thinner faced variety, intended, as the name suggests, for newspaper headline use. It is ordinarily used

in the extra condensed form in all capitals. An example of News Gothic condensed is shown below.

Legislators Denounced

Note that the lower case letters are higher in proportion to capitals than in the Franklin, and the curves are contracted into oval rather than circular loops.

American or Herald Gothic is a variation of the News Gothic. Note in the example below how, while preserving the same evenness of stroke and about the same thickness of line, they look different because the curves have all been squared off. Instead of making a smooth, even turn, the stroke cuts sharply across at an angle.

OFFER TO U.S.

The best of the new modernistic Gothics, Kabel, designed by Rudolph Koch, of Germany, and introduced into this country by the Continental Type Founders, represents the attempts that are being made to modify the oldstyle Gothics by departing from the mechanical exactness to get a little more life and variety into the face.

This Specimen is Kabel

Note in particular the openness of the looped letters, the diagonal cross stroke in the small *c*, and the diamond dot over the *i* as identifying features.

### BUT WHY USE GOTHICS?

Gothic faces may have their place in modernistic advertising typography while it lasts, but for the newspaper worker the best that can be said of Gothics is, "Avoid them."

There are so many other fine faces now available which will do the work of Gothics in a much more interesting and effective

manner. Type authorities the country over declare that a great stimulus to good printing would occur if printers and type founders scrapped all the block types they now offer.

### ROMAN TYPES

Roman is the largest group and, from the standpoint of the newspaper man or advertiser, it is also the most important, for the best of the faces available to his use will be chosen from this race. Roman faces, as has been explained previously, are characterized by their serifs and by their variations in shading between thick and thin strokes.

### OLDSTYLE AND MODERN

Roman type faces are divided into two great classes—oldstyle and modern. The former have come down to us with only minor changes from the first Roman or Italian types cast by Jenson and his contemporaries in the fifteenth century. In that day, it will be remembered, types were cut to resemble the handwriting of manuscript writers. The scribes of that day used a broad stub or quill pen and held it with the nib slanted in relation to the line of writing as shown in the diagram below.[4]

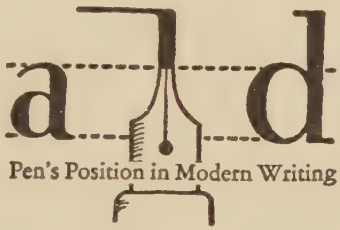
Pen's Position in Old Style Writing

Note how, because of the position of the pen, the serif at the top of the oldstyle letter is tilted in conformity with the slant of the nib. These sloping serifs are among the principal identifying features of oldstyle letters. Observe also the rounded effect given to the letters when the pen is held in this position and note how evenly and gradually the shading in the heavier strokes

[4] Frazier, *Type Lore*, p. 14.

takes place as the pen makes the curve. This makes for less difference between thick and thin strokes than occurs in some of the more modern faces.

The change to the modern letter came near the close of the eighteenth century, when Bodoni and his contemporaries tried to bring the oldstyle Roman letters into harmony with the taste of the time in matters of design. The modern letter is copied after the technique of the steel engraver, who held his pen or stylus with the nib at right angles to the written line, as shown in the diagram below.[5]



Pen's Position in Modern Writing

Note the differences that result when the pen is held in this position. The down strokes are very much heavier than the cross strokes; in fact, the cross strokes are reduced almost to hair lines. The serifs become straight instead of sloping, as in the oldstyle, for the pen moves in a horizontal line. The shaded portions of the stroke are balanced instead of weighted as in the oldstyle.

These differences can be better understood by studying actual examples of both kinds of faces.

Caslon Oldstyle, Aristocrat

Bodoni, a modern type face

Note also how the terminations at the top of the small *a*, *c*, and *r*, for instance, are oval in the oldstyle, whereas they are rounded in the modern. Observe how the finials or final strokes, as shown in the *a* and *t*, turn up in the modern, whereas they turn out in the oldstyle. Oldstyle figures vary in height; as shown here, the 1, 2, and 0, are the same height as the lower case letters, while the

[5] *Ibid.*, p. 14.

6 and 8 rise even with the tops of the ascenders, and the 3, 4, 5, 6, 7, and 9 descend below the base line of the letters.

1, 2, 3, 4, 5, 6, 7, 8, 9, 0

Modern figures are generally preferred today; hence many oldstyle faces have been provided with both oldstyle and modern or lining figures.

Oldstyle types are generally more legible than the modern. There is no stiffness or mechanical restraint in their letters; instead, they create a smooth-flowing effect that leads the eye easily along the line. There are no sharp points to confuse the eye, and freedom from sharp contrasts between light and heavy elements makes oldstyle faces easier to read in mass. Then, too, there is a certain humanness in the interesting irregularities of oldstyle types which makes them seem a bit more friendly than the stiff and mechanically perfect moderns.

Modern faces, on the other hand, have a certain sparkle and brilliancy which in small doses is pleasing but is likely to become tiresome when the eye has to follow through line after line of it. Modern types, therefore, are best for display work.

The oldstyle Romans are most widely used for advertising purposes and for printing in general. Many typographers consider them the most practical for all purposes as well as the most beautiful.

### Caslon

Foremost among the Roman type faces being used today is Caslon. From the time when William Caslon in 1722 first cut the types to which he gave his name, this face was the most popular for nearly a century. It was intimately associated with early American history, for it was used by most of the colonial printers and editors. John Dunlop, who made the first printed copies of the Declaration of Independence that were circulated a few hours after its signing, set this immortal document in Caslon Oldstyle. Benjamin Franklin used the same face extensively in his *Pennsylvania Gazette*, forerunner of our present day *Saturday Evening Post*.

Caslon fell into disuse in this country at the beginning of the nineteenth century when modern faces came into vogue. It was

revived in 1859 when the Johnson Type Foundry, a predecessor of the American Type Founders, imported Caslon Oldstyle matrices from England. It was not extensively used, however, until 1900, when the American Type Founders Company brought out Caslon 471. Since then the Lanston Monotype Company has brought out Caslon 337, and the Mergenthaler Linotype Company has brought out Caslon Oldface. All three preserve closely the characteristic features of Caslon Oldstyle. Type founders have also made available Caslon Bold, New Caslon, Caslon Medium, Caslon 541, and several other varieties to give a greater range of usefulness to this excellent face. Caslon Oldstyle is a little more delicately cut and not quite as regular in its letter formations as some of the newer varieties. It has interesting irregularities of construction that give it a human feeling and a certain charm and free, flowing line.

Today Caslon is considered so serviceable and so versatile that advertisers have adopted the slogan, "When in doubt, use Caslon." It can be used for almost any purpose, from a strong masculine effect with the bolder varieties to the most feminine of appeals with a lightface or italic, using swash characters for initials. It is modest and simple in design, yet good-looking and very easy to read—a plain, well proportioned, clean-cut face.

Now, how can one identify Caslon? Observe carefully the specimen line below.

# Set it in Caslon

Caslon, it will be noted, is a rather tall, graceful letter, with only a moderate contrast between light and heavy strokes. It is plain, simple, and unassuming, and yet it has a good deal of strength and character. It is marked by:

1. *Tall Ascenders.*

Durable

Note that the top of the *l* and the *b* come up even with the top of the capital *D* in this example.

It is the height of its ascenders that gives to Caslon its feeling of dignity and formality.

2. *Thin-Pointed, Slanting Serifs.*

Observe that the serif in both the *h* and the *i* comes to a decided point, yet note also how gracefully the inside curve of the serif is rounded to meet the main stroke of the letter.

It is the pleasing curve of the serif that goes a long way toward giving Caslon its grace and beauty.

3. *Identifying Letters.*

Look at the apex on the capital *A*. The main stroke extends beyond the light down stroke and is rounded out to form a graceful serif-like projection at the top.

The lower case *s* is distinctive because its endings have been squared off and do not have the points common to this letter in most Roman faces. Yet the formation of this letter is very graceful and swanlike.

You can always tell Caslon by its capital *C*. The down-stroke serif at the lower end of the capital *C* is peculiar to this face.

The lower case *e* has the weighted shading common to oldstyle faces.

The lower case *a* is also interesting in that its upper cross stroke leans far out over the loop below, and its curve parallels the upper curve of the loop.

The little projection on the lower case *g* turns slightly upward and ends in an oval drop.

Caslon is used by advertisers for so many different purposes that it would be impossible to enumerate them. One is always surprised when paging through the *Saturday Evening Post*, the *Ladies' Home Journal*, the *Woman's Home Companion* or any other popular magazine to find how often Caslon is used and for what a variety of purposes. It is found just as often in retail newspaper advertisements; it is used extensively both for head-

lines and body type in folders, booklets, house organs, broadsides, and other direct mail matter.

Caslon Bold is being used by some newspapers for news headlines. Uses of Caslon for headline purposes will be suggested in the next chapter.

Caslon is a type for moderate display. It will carry its message in a refined and dignified manner. Caslon Oldstyle, in fact, is rather self-immolating. It has the rare faculty of being able to present its message without permitting the reader to become conscious of the type it is dressed in. It represents common sense, straightforward simplicity, and dependability. Some newspaper men feel that Caslon is not quite heavy enough to meet their requirements. Some advertisers find Caslon a little too dignified and formal, perhaps a little cold, for their subjects. Yet Caslon continues the most popular of all faces.

### Garamond

Those who find Caslon too simple and modest in design or too formal and dignified in feeling can usually find a type face to suit their purpose in the group of Classic Oldstyle Romans such as Garamond, Kennerly, Goudy, or Cloister. These faces have more freedom of design than Caslon and are not quite as precise and stiffly drawn. They have the classic grace and freedom of the first Romans cut by Nicolas Jenson.

One of the most popular of this group is Garamond, which was revived in 1919 by the American Type Founders Company. The matrices of the original face, said to have been cut by Claude Garamond in 1540, had been preserved in the French National Printing office, and Morris Benton, who redesigned the face for the American Type Founders, made a careful adaptation from them.

The Garamond face is one of the most beautiful Roman faces ever produced. It was developed during that period when the French Renaissance stimulated a love of beauty. Claude Garamond, while patterning his types after the earlier Jenson models, created a more elegant face with a greater differentiation of stroke, more graceful lines, and shorter, bracketed serifs. Garamond fits into a picture of luxury and refinement.[6] It was the

[6] Frazier, *Type Lore*, p. 46.

type used for books when only royalty and the church could afford to buy them, when printers produced only limited editions and made each volume a labor of love and a work of rare beauty.

Its origin gives an excellent key to the use of Garamond. It is a face suggesting quality, dignity, distinction, and in a certain measure novelty. It does not fit with a price appeal or with any workaday job. It is decidedly feminine and, as compared with Caslon, it gives the impression that it is just a little affected like a fine lady putting on airs, but not enough so to be displeasing.[7]

What are the identifying features of Garamond? Observe closely the specimen line below.

# This is Garamond

It has more grace and swing than Caslon, and more warmth and color as well. Its general effect of strength and consistency adapts it for display. Its letters are good-looking in larger sizes because of their pleasing design and somewhat decorative character. Their general effect of freedom makes them very effective for major display.

Note the following distinctive features:

1. *Irregularity of Line.*

Old

Observe the slight unevenness along the edges of all down strokes.

2. *Concave Serifs.*

After

This slight concavity can easily be seen in the bottom serifs of the capital *A*, the *r*, and the *f*, and in the top serifs of the *t* and the *r*.

[7] Daniel B. Updike, *Printing Types*, p. 376.

3. *Tall Ascenders and Long Descenders.*

by these

Note the height of the ascender of the *b*, and the depth of the descenders on the *y*. Observe, however, that the *t* is quite short and barely rises above the top line of the body letters.

4. *Identifying Letters.*

e — The small *e* offers one of the best means of identifying Garamond. It has the weighted shading of an oldstyle letter, but is distinctive in that its crossbar is very high.

a — The small *a* also is interesting in that it looks so tall and thin. It has a very long neck, and its loop is unusually small. The loop, in fact, looks as if it were not quite big enough to support the rest of the letter.

c — The letter *c*, both capital and lower case, is more open than in other fonts.

g — The projection on the small *g* is distinctive. It sticks straight out from the loop almost like a little prong.

T — The capital *T* is unusual in that its right bracket points straight down while the left bracket turns out to the left. In linotype Garamond, both brackets of the *T* turn to the left.

Garamond, because of its feminine appeal, is used extensively in advertising to women, when it is desired to create an atmosphere of high quality. Paging through any of the women's magazines will disclose that Garamond is almost more popular than Caslon in the advertisements contained in those publications. Garamond also is being used extensively in newspaper advertisements by department stores and women's specialty shops.

Garamond is of particular interest to newspaper men and women because it makes such an excellent face for news and feature headlines on women's and society pages. Many news-

papers have adopted it for these special department pages because of its distinctly feminine appeal. Several women's magazines are also using Garamond with excellent effect for their title lines.

Garamond Bold, designed by Morris Benton and brought out by the American Type Founders in 1923 as a companion to Garamond Oldstyle, is an excellent display face of medium weight. It has been called the Adonis of type faces because it combines unusual masculine beauty with an interestingly strong character. It speaks in a well modulated voice and in a friendly manner, but with the suggestion of splendid reserve power. It speaks from the directors' room rather than the factory. It has rightly become popular with advertisers.

Part of the present popularity of Garamond lies in the fact that it has now been made available on both the linotype and intertype, as well as on the Lanston Monotype.

### Cloister

The present day Cloister Oldstyle and Cloister Bold are modeled closely after the original Roman letter first cut by Nicolas Jenson in 1470.

Jenson's types were revived by William Morris, a great English publicist and printer, in the latter part of the nineteenth century. Morris was disgusted with the weak, thin Romans in use at the time and went back to the original Roman cut by Jenson, which he declared was the finest ever produced. He did not, however, take over Jenson's types in their entirety, but redesigned many of the details to suit his own taste. His Golden Type was famous in its day. His types survive today in the Kelmscott and Jenson faces produced by the American Type Founders as reproductions of the Morris types.

In 1914 Morris Benton brought out for the American Type Founders Company a faithful copy of the type employed by Jenson, a face smoother and more graceful and stylish than the Golden Type. It was given the name Cloister Oldstyle.

It is one of the most interesting and attractive faces available to advertisers and newspaper men today, and has almost as wide a range of usefulness as Caslon. Cloister is a very easily read type and, while it is quite uniform in tone, there is a sort of mellowness

of form about it that is pleasing and attractive. It has an easy grace and freedom that make its letters seems to roll along the line.

These characteristics can best be observed by studying a specimen line.

# Cloister is an attractive face

Cloister, it will be observed, is slightly darker and heavier than Garamond, and there is less difference between thick and thin strokes. It is, in fact, one of the steadiest of the irregularly designed or classic Roman faces. Its distinguishing features are:

1. *Unusually Long Ascenders and Descenders.*

graceful

The ascenders, it will be noted, are fully twice the height of the lower case letters, while the descenders go nearly as far below the line. This has the effect of making the body look relatively small in comparison.

2. *Sloping Serifs—Strong Without Appearing Heavy.*

d

Comparison of the Cloister serifs with those of Caslon and of Garamond will show that they are a little less pointed than the former and lack the concavity of the latter. They are a trifle thicker and stronger than either of the others.

3. *Letters Have Rounded Effect and Fit Close Together.*

mellowness

Rounded curves on all looped letters and on the tops of the *n* and the *m* give a pleasing roll to a line of Cloister. The close fit of the letters permits an extra large unit count, which makes Cloister admirable for newspaper headline purposes. Despite the close fit of the letters, the rounded effect gives enough white space within to make the face very legible.

4. *Identifying Letters.*



The lower case *e* is the best guide to Cloister. Note the diagonal cross stroke and the projection of the crossbar beyond the point at which it meets the down stroke. This is distinctive of Cloister.

Observe the interesting irregularities on the bottom of the *i* and the *l*. There seems to be a wave in this bottom cross stroke, and it is tilted a trifle to the right.

The lower case *g* is another good identifying letter. Its descender is quite long and not as squat as in many other letters. The projection, as in Garamond, is straight from the right side of the loop, but in Cloister the projection is from the top of the loop.

Note how the shading in the *o* is decidedly weighted. The stroke is thickened on the lower left-hand side and on the upper right-hand side instead of evenly on both sides. This makes the letter appear ready to roll along the line.

The small *y* ends in a straight stroke without any loop or flourish at the end.

Cloister Oldstyle is a fine letter and creates a feeling of charm wherever it is used. It gives a rich effect, especially when printed on antique, deckle-edged paper. It is, however, equally well adapted to smooth-finish papers.

Used in mass, Cloister looks "different" and more interesting than the modern Romans customarily used for body type. A comparison of the two specimens below will readily show this difference.

*Cloister*

Books drawn on clay or stone tablets are not comparable to books written on parchment scrolls, while hand-lettered illuminated books of the Middle Ages are in a different category altogether from the twentieth century volume.

*Century*

After you have the set working, you may add two vacuum tubes in an audio frequency amplifier, which will give sufficient volume for loud speaker operation but will not increase the range of the set.

Cloister suggests craftsmanship—the artist who works with

metals and jewels, fabrics, laces and the like.[8] It is perhaps a little more masculine, a little sturdier than Garamond and Caslon.

Its italic, however, is very feminine. It is decidedly novel and quite unlike any other existing italic. There was of course no italic at the time of Jenson. But the Cloister Italic, brought out by the American Type Founders in 1923, is closely modeled after sixteenth century italics and harmonizes beautifully with Cloister Oldstyle. It is said by many to be the most virile and striking italic now available. At the same time, its love of flourishes and curls suggests a very feminine capriciousness.

*Automobile Exhibit*

Cloister Bold, brought out in 1915, is regarded by many as one of the best boldface types. It is an excellent face for newspaper headlines—in fact, it is the writer's first choice for this purpose. Advertisers also find it a good display face. It is a very effective bold to use with lighter Garamonds and Kennerlys as body type.

The whole Cloister family, in fact, provides excellent tools for the typographer. Its members are versatile and can be used for the best printing.

### Kennerly Oldstyle

This interesting type face was designed in 1911 by Frederic W. Goudy, one of America's foremost type designers, for a special edition of H. G. Wells's stories published by Mitchell Kennerly. Goudy was commissioned to cut a book type on entirely new lines, and the face that he produced is one of rare beauty, modeled on classic Roman lines.

Kennerly is an artistic face. Not only is it beautiful in detail but it is also attractive in mass. When composed into words the letters lock into one another with a closeness common in early types but rare in moderns. This not only permits more units to the line but gives a more intimate appearance to the page.

There is a softness and charm to Kennerly that has caused many advertising men to give it first choice as a booklet and

[8] Frazier, *Type Lore*, p. 39.

circular type face. There is so much of grace about it, too, that it has become a favorite face for use in advertisements making an especial appeal to women.

The characteristics of Kennerly can best be understood by carefully examining a specimen line.

# Grace and Freedom

Kennerly, it will be noticed, is lighter than either Garamond or Cloister. It is closer to Caslon in weight, but is a little darker. It is characterized by light yet firm strokes. When an appeal must be made with more classic charm than is possible with Caslon, yet with a gray color required, then Kennerly is the choice. When this classic appeal, combined with a little more color, is desired, then Garamond is better. Kennerly has the same freedom, the same irregularity and individuality in letter formation as Garamond. The two go well together and are frequently used, with Garamond for display and Kennerly for body.

The openness of Kennerly letters is distinctive. The upper strokes of the *a* and the *c* and the curves of the *m* seem to have opened out. The *o* seems to have been spread, and the same thing has been done to the curves of all looped letters in order to get more white space within the letters. All of which makes Kennerly a very legible face.

And that openness makes Kennerly the face of frankness. It tells its story honestly, yet touched with sentiment, for Kennerly endows even the simplest facts with the poetic beauty of truth.

The distinguishing features of Kennerly are:

1. *Long Ascenders and Descenders.*

# Establishing

The ascenders of the *b*, and the *l*, it will be noticed, rise above the capital. Unlike Cloister, however, the body does not seem so small in comparison, for the opening out of the body letters has raised their height and made them proportionately larger.

2. *Sloping, Slightly Concave Serifs.*

skillet Serifs are not quite as heavy as in Garamond or Cloister—they are unobstrusive, and yet well formed and sufficiently strong.

H The concavity of the bottom serif is not as clearly marked as in Garamond. It is just enough to give a pleasing informality to the face.

3. *Identifying Letters.*

e As in Cloister, the small *e* is distinctive in that the cross stroke is diagonal. Unlike Cloister, however, it does not project beyond the down stroke.

g The projection on the *g* has a fancy little up curve from the top of the loop.

typo- The hyphen is diagonal.

h The curves of the *h*, the *m*, and the *n* are rounded out to make them appear as if they were almost leaning against the rest of the letter.

s The *s* is a bit different in that the bottom ending extends back beyond the neck or upper loop. Note also the concavity in the serifs forming the points of the *s*.

a Observe that the small *a* has been opened up. The neck is high above the loop, and the loop itself, instead of being smoothly rounded, has been squared out to introduce more light.

The *y*, while resembling that of Cloister, turns just a trifle instead of ending in a straight stroke. Notice also that it has an oval ending.

The *O* seems to have been opened out on both sides. Note also that the shading is balanced instead of weighted as in most oldstyle letters.

The outside strokes of the *w* and *v* seem to be slightly curved.

Kennerly Oldstyle is essentially a book or body letter, and it will be found very frequently as the body type of high quality magazine advertisements.

Goudy has also brought out a Kennerly Oldstyle Italic as a companion face. Note in the example below that it is a little less inclined than most italics and yet has a great deal of freedom, an easy swing, and a marked decorative quality.

*books by Philolalus for*

Kennerly Bold and Kennerly Bold Italic also are available when more color in mass or display is desired. Kennerly Bold makes a good display face for an artistic or classic effect. It is used best in combination with either Kennerly Oldstyle or Garamond for body.

Kennerly is not as widely used as Cloister or Caslon for general printing because it is less versatile. It is more suggestive of free lettering. For forms of large display, such as broadsides or posters, in which this effect is desired, a Kennerly Bold is often very effective.

Kennerly, like Garamond, is interesting to the newspaper man because of its possibilities for use on women's and society pages. A number of newspapers have adopted it for headlines on these special pages. It is also finding a wide use in newspaper advertisements of women's specialty shops, florists, and jewelers where it is desired to express exclusiveness, refinement, and high quality.

### Goudy

The serviceable and good looking members of the Goudy family are among those being seen with increasing frequency in newspapers. They have long been popular in national advertising. The excellence of Goudy Bold as a newspaper display face has made it very much in demand among newspaper advertisers; and news editors, attracted by its possibilities, have drafted it for streamers and spread heads. Goudy types have a certain decorative quality, based on a characterful serif formation, that makes them popular for many kinds of printing.

The first of this family, Goudy Oldstyle, designed by Frederick W. Goudy, shows a strong affinity with the classic Roman types of the early Italian printers, but it is enlivened by a greater contrast between its heavy and light elements as well as by more acute serifs. It has some of the characteristics of Kennerly but is lighter in color, more regular in design, and less monotonous in construction. It has, furthermore, a quality all its own, which some authorities have characterized as "flowing." There is no stiffness or restraint; it is exceedingly graceful and free, and decidedly feminine in appeal, as can readily be seen in the following specimen.

# Beautiful Gowns

Goudy Bold, designed in 1917 by Morris Benton for the American Type Founders, and Goudy Modern, designed in 1918 by Frederic Goudy himself, represent companion faces for bolder display. Goudy Bold is quite masculine and is one of the most popular and best of all the boldfaces. Its beauty of form compensates for its depth of color. Goudy Modern is more medium in weight and slightly modernized in form.

The characteristics of Goudy types can best be understood by examining in detail a line of Goudy Bold, which will show its outstanding features most clearly.

# A Face with Character

One of the first things that impresses one is its hand-drawn effect. One can almost see the turn of the broad-nibbed pen strokes, particularly in the *r* and the *a*. There is great individuality and character in the letters, and they convey that hand-lettered effect which is so much sought after by artistic printers and advertisers.

The great contrast between the light and dark strokes is demonstrated more clearly in the oldstyle specimen, but the boldface also shows how the light shines freely through each character because of the large size of the body letters and the openness of the counters. To more clearly illustrate identifying features we shall present them in the boldface.

The distinguishing features of this face are:

1. *Tall Ascenders and Short Descenders.*

Slip

Ascenders are as tall as the capitals, giving height and dignity to the face, but the descenders are quite short, making the body letters look larger.

2. *Acute and Markedly Concave Serifs.*

This

This is particularly noticeable along the bottom line of the letters. This interesting serif formation is what gives character to Goudy letters. In the capitals, the tops and bottoms of the main strokes look as if they had been hollowed out.

3. *Identifying Letters.*

i

The diamond dot over the *i* and the *j* offers the quickest means of identifying Goudy.

LE

In the capital *L* and *E* the bottom stroke turns up in an interesting curve, instead of at an angle as might be expected.

The crossbar on the lower case *t* turns up on the right-hand side like a little flag.

The projection on the *g* turns up like a little horn sticking out from the loop.

The front down stroke of the capital *N* does not meet the diagonal cross stroke at the top but at a point about one-sixth of the way down, and the diagonal stroke is rounded gracefully to meet it, giving the effect of bending the letter inward.

Goudy, like Cloister, is quite versatile. Its oldstyle, italic, and cursive varieties can be used to good effect for a feminine appeal. They, too, express exclusiveness, high quality, and refinement. The bolder forms of Goudy are equally as effective for a sturdier masculine appeal. The lighter forms show up well in the smaller sizes and make an excellent body type for booklets and direct mail pieces; in fact, for this purpose they are almost as popular with many advertisers as Kennerly. The monotype version of Goudy Oldstyle is particularly attractive for this purpose.

Goudy Bold looks well as a display type with other faces. Its ideal companion, of course, is Goudy Oldstyle, but it makes an admirable display face also for Caslon, Kennerly, or Garamond. Admirers of Bookman also find Goudy Bold a suitable and effective companion. Because of its depth of color and its originality of form it is an attention-arresting face and is found very frequently in the headlines of all national advertising in which a little stronger effect than that given by Garamond, Caslon, or Kennerly is desired.

Goudy Bold is an excellent display face for newspaper advertising. Its depth of color shows up well against newsprint paper. It is very popular for department store and men's furnishing store advertisements.

A comparatively recent member of the family that is finding great favor is Goudy Handtooled, brought out in 1923 by the American Type Founders.

# If You are Particular

It has all of the usual Goudy features, but it has a fine white line tooled out of the main strokes. It is a very decorative and artistic face, brilliantly shaded. Except for short formal announcements, it is never used in mass, but always for display in advertisements, booklets, or periodicals to give a sophisticated and high quality finish. It is becoming very popular for heads in magazines and small publications. If this face is not available, Narciss can be obtained on the linotype, Cloister Handtooled on the intertype, and Cameo on the Ludlow Typograph for the same purpose.

For extra strong display in newspaper advertising, three new members—Goudy Extrabold, Goudy Extrabold Italic, and Goudy Heavyface—have recently been added. The latter has the same weight and color as Cooper Black.

### Bookman

Another good oldstyle face, popular with advertisers because of its legibility, is Bookman. It is useful where more force than can be obtained with the usual body types is desired and where a bold would be too heavy. It is what many advertisers call a "middle-toned" face. Bookman is one of the faces that the newspaper worker should know because it is so legible and because it shows up so well against newsprint. The *New York Times* uses Bookman for its feature heads in several of its Sunday sections, and while it is not a face that lends beauty to a page it does make a headline that attracts by its very legibility.

This face was first brought out as Oldstyle Antique by the Edinburgh Type Founders, but was popularized in this country as Bookman by the American Type Founders. Bookman Oldstyle and Bookman Italic first became popular as faces especially suited for the printing of deluxe editions of books and periodicals on antique papers, where their plain, sturdy black is very effective.

Bookman holds a rather distinctive place among American type faces, not because of its beauty, for it is rather lacking there, but because of its sturdiness and readability.

# Modern Printed Art

As can be seen from this specimen, it is a round, honest-looking type. It cannot be called a beautiful type because of its monotone construction, and it lacks the crispness and interest possessed by faces with greater differences in shading, but it convinces by a sort of rugged simplicity and sturdiness. It dresses plain facts with truthfulness. You can always be sure that what it says is so.

When the advertising message is a simple, straightforward story, and the art work is rather heavy, so that to use Caslon or any other lightface would make copy and pictures look unrelated, then the advertiser uses Bookman, for its added depth of color brings tone-harmony into the advertisement.[9]

One automobile manufacturer has consistently used Bookman against a blue background in all of his advertising to drive home the idea of honest workmanship in his car—the blue color for truth and sincerity and Bookman type for honesty and reliability.

Now what are the distinguishing features of this face?

1. *Short Ascenders and Descenders.*

Bookman Oldstyle

Note how short the *k*, the *l*, and the *d* are in comparison with ascenders on the other faces studied. And observe that the descender on the *y* barely goes below the line.

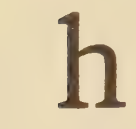
2. *Large, Round Body Letters.*

Sturdy

Bookman body letters are higher in proportion to ascenders than in most faces. This effect, of course, is enhanced by the shortness of both ascenders and descenders.

[9] G. P. Farrar, *How Advertisements are Built,* p. 185.

3. *Short, Thick, Sloping Serifs.*



Instead of coming to a point, the serifs are squared off at the end and quite sharply defined.

4. *Even, Monotone Strokes.*

Note how little variation there is in the stroke. This even tone makes Bookman one of the steadiest of types.

5. *Distinguishing Letters.*

There are few identifying letters that one can select in Bookman. One recognizes the type not so much by individual letters as by the general tone and appearance of the face.

One of the letters that may be helpful is the small *o*, which is almost round and shows hardly any variation in stroke all the way around.

Another letter that is a bit different is the *S*, both capital and lower case. It looks as if it were squatting back on its haunches.

The capital *T* has its brackets spread widely on either side.

Bookman is a serious-minded type—it means business. It is made of strong, sturdy lines. There is not a single frivolous stroke in its design. It is the puddler, the molder, the riveter, or, if you choose, the engineer of the Roman type race.[10] It is a strong, two-fisted "he" type. It means work.

Because Bookman is not particularly attractive in larger sizes, the advertiser uses it more for body type than for display lines. That is one reason why the typographer hesitates to recommend Bookman for newspaper headlines, although there is a good deal

[10] Frazier, *Type Lore*, p. 81.

to be said for its legibility. The advertiser, however, uses some other good boldface such as Goudy, Cooper, or Cheltenham as a display line with Bookman body. It makes a good body type in advertisements where a feeling of sturdiness, reliability, and honest simplicity is desired. When an advertisement has no headline or picture, Bookman, because of its sturdy self-reliance, is the face to use. It is very often employed in booklets and direct mail pieces of high quality, for it makes a very legible body type and creates a rich looking black against rough or antique finished papers.

### Pabst Oldstyle

Before leaving the oldstyle faces, it may be well to include in the newspaper man's working kit of type faces one of the rugged oldstyles as representative of this group.

Pabst is probably the most popular. It is both distinctive and original. In common with other faces of this group, its strokes are rough and irregular, giving the type a rugged appearance. It is rather a black face, for it has little variation in shading. Hence it is used largely for display lines, as it is rather hard to read in smaller sizes.

## Pabst Oldstyle Looks Like This

The specimen line above reveals the general character. Observe the rugged, irregular strokes. Note in particular:

1. *The Unusually Tall Ascenders.*

Ruggedly

Both capitals and tall letters rise to more than twice the height of the body letters. By comparison, the latter look short and squat. Descenders vary strangely. The *y* does not reach down as far as the *p* or the *g*.

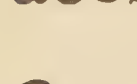
2. *Rough, Sloping Serifs.*

n k

Note how the serifs are rounded off rather roughly at the ends. Serifs at the top of the ascenders are quite prominent.

3. *Identifying Letters.*

The lower case *e* is most distinctive. See how it looks flattened out on top and appears to be leaning to one side.



The small *c* appears to lean forward.

The loop on the small *a* is unusually short and squat.

The projection on the *g* takes the form of a fancy curlicue on top of the loop, while the loop itself looks too heavy for the descender below it.

Both brackets of the capital *T* turn to the left.

The descender on the *y* is bent backward toward the line, making it shorter than other descenders.

The capital *A* is one of the most unusual of all Pabst letters because of the peculiar projection toward the right at the apex.

The italic is still more irregular and unusual. Observe the peculiar hook-like serifs at the top of the ascenders, and the odd looking *t*.

Pabst is one of those faces that looks "different." Because of that, a number of newspapers have adopted it in place of italics

for contrast and feature heads. A few are using Pabst for editorial heads. Some department stores and exclusive women's shops have adopted it to give a distinctive type dress to their advertisements. By its rugged, hand-lettered effect it is also useful in suggesting a feeling of antiquity. It has been used for this purpose to good effect by art, book, gift, and antique shops.

If something a little lighter in tone is desired, Packard is one of the best type imitations of hand lettering available. It is better proportioned and more graceful than Pabst, a little more feminine. There are several other faces with the same rugged and antique characteristics, such as Post, Roycroft, Plymouth, and Powell. If the printer's equipment does not include Packard or Pabst, somewhat the same effect can be obtained by calling for any of the others in this group.

### Bodoni

This type face, representative of the best of the moderns, is one of the most contrasting and colorful faces available. Its revival in 1911 by the American Type Founders was a milestone in American typographic progress. The present-day Bodoni is modeled closely after the first true modern cut by Giambattista Bodoni in the latter part of the eighteenth century.

As can be seen from the example below, Bodoni is characterized by fine hair-line cross strokes in combination with heavy black down strokes.

# Sparkling Contrast

Bodoni has greater contrast between its light and heavy elements than any of the other good faces in common use. It is also narrower in proportion to height than any of the others enumerated in this chapter, with the exception of Cloister. Both these faces, therefore, are excellent for news headline purposes.

There are a number of varieties of Bodoni available, but the newspaper worker will be principally interested in Bodoni, Bodoni Italic, Bodoni Bold, and Bodoni Bold Italic. A lighter Bodoni Book is also useful in booklets or circulars.

The distinguishing features of Bodoni are:

1. *Straight, Thin, Hair-Line Serifs.*

Sharp — There is no rounding curve to meet the main stroke. The serif is absolutely flat.

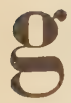
2. *Ascenders and Descenders of Medium Length.*

quick — The ascenders give the necessary height to counteract the expanded appearance, made by the heavy strokes, of the body letters.

3. *Identifying Letters.*

One really needs no identifying letters for Bodoni because its general appearance is easily recognized. For the beginner, however, it may be well to have in mind a few guides as shown in the specimen of Bodoni Bold below:

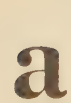
The *o* is typical of the other letters of this face. The shaded portions are perfectly balanced on each side, like two quarter moons, while the connecting strokes are mere hair-line curves.



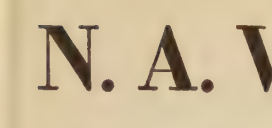
The same characteristics are even more apparent in the loop of the *g*.

The small *c* is interesting in that it consists of only the one quarter-moon down stroke and the round dot termination with connecting hair-line curves.

The small *t* is different. Note that the top of the main stroke appears to be hollowed out, while the cross stroke is but a thin hair-line without any connecting serif.



The small *a* appears to be squared off at the top.




The capital *N* has two hair-line down strokes with a very broad diagonal in between. Single hair-line down strokes are also found in the capitals *A, M, U, V, W,* and *X*.

Bodoni is sharp, quick, vivacious, and vigorous. It is also dignified, polite, refined, and a bit cold. It looks clean-cut and precise. The face as a whole is open and delicate. One typographer has described Bodoni as a very precise gentleman dressed up in a stiff collar.[11] It is more masculine than feminine.

Bodoni is one of the best faces available for news headline purposes. It has a certain sparkle and brilliancy, a snap and vigor that give life and interest to any newspaper page. For the very same reasons it is also much in demand by advertisers. It goes well in advertisements for formal evening clothes or for any men's furnishings that go to give a man a well-dressed appearance. While more masculine than feminine, it is frequently used to give a certain effect of modishness to advertisements for women's gowns and furnishings. It suggests cleanliness, and so is much used in advertisements for soaps and shaving preparations. It is particularly good in advertisements in which illustrations combine fine lines with heavy black masses. Because of its rather precise character, Bodoni is preferred by many business men as a face that looks practical and businesslike.

This excellent face has recently come very much into vogue with the advent of the modernistic trend in advertising. It is now available on linotype, intertype, and monotype, as well as in foundry type, and is being used widely by both newspaper men and advertisers.

### Century

This face, which is one of the most useful and most readable of all type faces, was originally cut in 1895 by L. B. Benton, the father of Morris Benton, in collaboration with Theodore Lowe De Vinne especially for the *Century Magazine*. Hence its name. It was designed to give greater clearness to pages with narrow margins and to columns in which the older, expanded types did not look so well, and was made taller to appear more compressed.

[11] Frazier, *Type Lore*, p. 71.

This face was used for several years by the *Century Magazine*, but was not generally adopted because it was a little too narrow for general use. It was not until the American Type Founders brought out Century Expanded in 1900 that it was put to wider use.

This face was a great favorite with the late Benjamin Sherbow, one of America's foremost advertising typographers. His verdict, put tersely, was that "Century expanded is one of the faces everyone reads with ease, hence it is a good type for advertising."[12]

Because of its legibility, Century is often used by newspapers. Century Bold is frequently seen in newspaper headlines and Century Expanded is one of the best newspaper body types. It is also the type in which most school books are printed.

Now how does one identify Century? Check over the details of the following specimens carefully.

# Neat Advertisement

It is a good, plain, workaday face. The letters are quite open, making for legibility. Perhaps it is just a little severe and mechanical in its construction. Note that while there is some contrast between light and dark strokes, there is not enough to create any sparkle or interest. Its identifying features are:

1. *Tall Ascenders and Short Descenders.*

Beautyland

The tall ascenders help to give Century the feeling of height that is characteristic of this face.

2. *Large, Round, Body Letters.*

Auto

They are not particularly wide, but are rather tall and narrow and a bit high shouldered.

[12] *Ibid.*, p. 85.

3. *Long, Straight, Precise, Well-Defined Serifs.*

Observe how long and well-defined the serifs are in Century, thick enough to be squared off at the end. The inside curve, connecting with the main element, cuts in quite abruptly. Note carefully that the top serifs are not exactly horizontal but tilt up slightly to the right. The precise, blunt, serif formation in Century gives it a rather stiff mechanical appearance.

4. *Identifying Letters.*

The decided points on the small *s* offer one of the best ways of recognizing Century.

Note the heavy brackets on the capital *E*, *F*, and *T*.

The cross bar of the lower case *e* is lower than in most faces, and the finial almost comes up to meet the cross stroke.

One can always tell Century by its absolute regularity of form. While this makes the letter steady and easy to read, it also makes it mechanical and commonplace.

Because of their legibility, Century Bold or Bold Condensed are frequently used for newspaper headlines. Century Expanded is one of the faces used most frequently for newspaper body type.

Century does not have as wide a range of usefulness as an advertising face, for it is one of the common laborers of the type race. Its effect is that of a busy workman dressed in overalls.[13] It is the type face for common advertisements and booklets on common subjects, but it is wholly unsuited for quality printing that demands skilled artisans such as Garamond, Caslon, or Cloister.

One of the members of the Century family, however, is more popular. It is Century Oldstyle, another of the transitional faces.

[13] *Ibid.*

It owes its charm to the fact that it combines some of the softness and flowing qualities of the oldstyle with the orderliness and regularity of the moderns.

# Becoming Distinguished

Observe that the sloping serifs and weighted shadings are oldstyle characteristics, but it has also a good deal of the orderliness of the regular Century. Some people have difficulty in telling Century Oldstyle from Caslon, but the former is wider than Caslon, has greater uniformity in tone, and is not as graceful. The serifs are not as sharp, and the body strokes are heavier. If all other signs fail, one can always tell Century Oldstyle by the points on the *s*, which are lacking in Caslon.

Century Oldstyle has a large face in relation to body and therefore has great legibility. It frequently is used as a body type for booklets and folders. Century Oldstyle Bold is a sturdy display letter that is more attractive even than the Cheltenhams, and in the opinion of some more attractive even than the bold Caslons. It is very frequently used for newspaper headlines.

### Cheltenham

This is one of the most widely used of all type faces and is one of the largest type families, having more than thirty members. It is an American face, designed in 1906 by Bertram Grosvenor Goodhue, a noted architect talented in lettering. He created this face in collaboration with Ingalls Kimball of the Cheltenham press of New York, which accounts for its name.

The first member of the family was Cheltenham Oldstyle, shown below.

# Ancient Senators

Note its monotone construction and the short, rather blunt modern serifs. These serifs permit the letters to fit close together; in fact, this face allows almost a fifth more copy to the space with respect to point size than do most types.

Cheltenham was something new and different and it became popular at once. Other members were added to the family in rapid order—Cheltenham Bolds, Mediums, Wides, Condensed and Extra Condensed, Outlines, and Italics—until nearly every print shop had a wide variety of styles in this face. It was used so much that it became commonplace. Its lack of grace and subtlety, in comparison to other more interesting faces, is so pronounced that in late years Cheltenham has declined in popularity, especially among the advertisers. One must turn many pages in the *Saturday Evening Post,* the *Ladies' Home Journal,* or any of the other national advertising media today to find a trace of this once popular type.

But while it has died out in the magazines, it is still very popular for newspaper use. This is largely because Cheltenham shows up better on rough newsprint than do some of the finer faces. It also stands up better under the crushing pressure of mat-making for stereotypes. It is strong and rugged, and capably meets the rough and ready conditions of newspaper printing. From the standpoint of wide usage, it probably still ranks first among newspaper display types.

Its distinguishing features are plainly seen in the Cheltenham Bold specimens below.

1. *Monotone Construction.*

**Common Sense** There is only enough contrast between light and heavy elements to avoid absolute monotony.

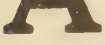
2. *Blunt, Heavy Serifs.*

**Laborer** The serifs are modern and straight but quite short—squared off at the ends, then rounded down to meet the heavy main stroke.

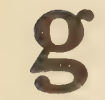
3. *Tall Ascenders and Short Descenders.*

**Honest Looking** The capitals and tall letters are twice the height of the small letters, but note that the descender of the *g* barely goes below the line.

4. *Identifying Letters.*



The main stroke extends beyond the apex of the capital *A*, as in Caslon, but the projection is bluntly squared off, not gracefully rounded down, as in Caslon.



The most distinctive letter is the lower case *g*. The bottom part, it will be noted, is open and looks somewhat like the lower part of the figure *5*.

The round knobs of the lower case *s* and *c* are good guides to Cheltenham.

The foot of the capital *G* has an unusual shape. Note the strange projection at the front.

Cheltenham is quite legible, but it is not very attractive or distinctive. And the more condensed it is, the less attractive it appears. The condensed forms should never be used for advertising purposes, for they are ugly and cheap looking. And they are just as undesirable for news headline purposes.

For newspaper headlines, Cheltenham Bold or Cheltenham Medium in upper and lower case make a strong and effective contrast against the gray news matter. In either of these forms, Cheltenham makes a good, legible headline. But in the extra condensed all-capital headlines found in so many newspapers, Cheltenham is almost as hard to read and as unattractive as any of the Gothics.

Cheltenham does not possess beauty, grace, or refinement. It is a letter emblematic of the masses—a face that can accomplish a good day's work at common labor. It will do for commonplace printing, but it lacks the artistic beauty and the grace of feeling reflected by the better faces such as Garamond, Kennerly, Goudy, Caslon, or Cloister.[14] Cheltenham Bold is very strong and

[14] *Ibid.*, p. 94.

makes a good display face, except that it is rather mechanical and plain. It cannot compare with other boldfaces such as Goudy or Cloister, which have as much force and more interest and character. Since newspaper composing rooms have made other faces available to advertisers, Goudy, Bodoni, Garamond, and Cloister are displacing Cheltenham even in newspaper advertisements.

Because Cheltenham is a good, honest-looking, commonsense face, it will, in all likelihood, continue to have a certain popularity despite its lack of grace and beauty, and there will be many places in which the various members of its family will be useful.

Cheltenham Wide is a good middletone face for use when Bookman is not available. Cheltenham Bold is used in newspaper advertisements of some men's clothing stores because of its sturdy, masculine appeal. It goes well, for instance, in an advertisement for heavy winter overcoats. When it is used for body type, the copy must be limited to a very short message and the lines must be well leaded, for blackface type requires more white relief in order that the eye may pick up each word separately.

There are times when cuts and nameplates are so dark that a lighter body type, such as Caslon Oldstyle, would be out of place and would make the advertisement appear to be cut through the center. In such cases, a Cheltenham Medium or even a Cheltenham Bold may be useful. Particularly is this true in advertisements in which there is no headline to start the message. For an important business announcement of a few words and large space, Cheltenham Bold is about as good a face as can be found, for it suggests not only strength but unusual importance.

### Cooper Black

In his toolbox of type faces, the newspaperman or advertiser will want one or two heavy faces for exceptional display.

Probably the most interesting of this group is Cooper Black, brought out in 1919 by Barnhardt Brothers and Spindler. Oswald Cooper, a commercial artist of note, had been drawing a characterful and original bold letter that had been greatly in demand for years and widely imitated. The Barnhardt Company saw

possibilities in translating this unusual lettering into type, and asked Cooper to design the face, which was then brought out as Cooper Black.[15]

Cooper is a striking display face of extreme blackness and wholly original serif construction.

**This is Cooper Black**

Observe how much heavier it is than most faces, and how much larger the body letters are in proportion to the rest of the face than is true with any other type. Other interesting characteristics are:

1. *Exceedingly Short Ascenders and Descenders.*

**strength**

2. *Unusual, Rounded Out Serifs.*

**Reserve**

The serifs give vigor and originality to the face. The bottom serifs have aptly been described as "elephants' feet."

3. *The Peculiar Dot on the "i".*

**i**

Note the oval shape of the dot and that it lies sideways over the letter.

4. *The Narrow, Oval Slit of White in the "o".*

**o**

Observe that it, too, tilts sideways.

[15] *Ibid.*, p. 110.

Cooper is so easily recognizable, however, that one hardly needs any guides. It has that interesting quality known as personality, coupled with extreme physical forcefulness. It speaks out boldly and drives its message home with vigor and conviction. It gives "punch" to a display line. It dominates by its personality and forcefulness, for it looms outstandingly above everything else on a page.

A few newspapers have experimented with Cooper Black as streamers, as secondary banners, as extra ribbons above the nameplate, or as bottom page lines, but these experiments have not proved successful, for Cooper presents too violent a contrast to the rest of the newspaper page. It dominates everything about it.

Cooper, however, is a face that the newspaperman should know because of its usefulness in newspaper advertising. It is a striking and effective face in big advertisements. It is probably the best face for the heavy artillery of a direct advertising campaign, the broadside. It can be used equally well on car cards. But used in smaller space, it must be employed with care. A little Cooper goes a long way. A single display line, if not too large, may be effective, but Cooper can easily be overdone by overdisplay.

Being heavier than most boldfaces, Cooper Black needs heavier companions than the average body faces. A Cooper Oldstyle for body has been brought out to go with the black, and it makes an ideal companion and an attractive face. If it is not available, Bookman or Cheltenham will serve. When Cooper Black is not available, Goudy Heavyface will give almost the same effect.

## CONCLUSION

There are many other type faces that might be introduced to the student of newspaper typography, but to do so might be to throw him into confusion. Some of the faces that we have not mentioned are very good. Others are chiefly to be avoided. As the student widens his acquaintance with types, he will find other interesting faces which can be used effectively.

But the handful of good faces that have been analyzed in this chapter will provide a working kit of types to meet the needs of any newspaper worker. They represent some of the best faces that typographic art has made available to the newspaper today.

### SUGGESTIONS FOR THE STUDENT

1. Practice identifying the type faces that you find used in the best advertisements in current magazines.
2. Analyze the typography of your local newspaper. Identify the faces used for both news matter and advertisements.
3. Make a comparative criticism of the type faces used for headlines in several different newspapers.
4. Criticize the typography of advertisements in your local paper. What type faces would you suggest to improve the effectiveness of individual advertisements?
5. Visit your newspaper composing room and find out what faces are available in cases and on machines. Perhaps the advertising department can supply a type specimen book showing the various faces and sizes it has to offer to advertisers. From the faces available, what changes would you make in individual advertisements appearing in the paper?
6. Practice writing type specifications for various kinds of matter found in your newspaper.
7. If a type laboratory is available, try setting up simple advertisements in different type faces to see the difference in effect.

## CHAPTER VII

### NEWSPAPER TYPE DRESS

NOW that the student has made the acquaintance of a few of the good type faces he is ready to undertake a study of how these faces may best be used as newspaper headline and body types.

The choice of headline type is perhaps most important, for the headlines first catch the attention of the reader and are a determining factor in the general appearance of the paper. While many newspaper publishers say that preferences in headline type faces are largely a matter of personal taste, typographers know that types have individual characteristics that must be taken into consideration if the most effective display is to be obtained.

In general, American newspapers divide themselves into three classes of typographic tone. There is one group made up of the more conservative papers such as the *Christian Science Monitor* and the *Kansas City Star,* which present an even gray tone with little contrast between heads and body. There is a second class represented by papers such as the *New York Herald Tribune,* the *Milwaukee Journal,* and the *Chicago Tribune,* which use black heads in contrast with gray body. Then there is a third class comprising such papers as the *Denver Post,* the *Chicago American* and many other of the Hearst papers, whose front pages present an almost black tone. All the heads are big and black, and even much of the body type is set in boldface.

The papers of the first class are quiet in tone—they speak in well modulated voices and, in general, appeal to the more conservative reader. Their type dress reflects a paper that is sane and responsible.

The second class, which includes by far the greater number of papers, appeals to average readers all over the country. These papers are not afraid to raise their voices when occasion requires, but they are not too easily excited; they are usually good, constructive newspapers.

The third class is made up of the papers that make their appeal primarily to the masses, whom they believe cannot be reached except through glaring headlines and much black ink. They shout at the tops of their voices all the time, they clamor for attention, they breed excitement.

What kind of tone to use depends on the kind of newspaper one is conducting. In general, however, it would appear that the contrast tone is best; it makes the best appeal to the normal, average reader. The all gray tone is likely to look too dull to many, while the black-toned papers repel many by their very blackness. The human eye likes contrast. Dark headlines against gray body give the relief that the normal eye craves, and create a liveliness and interest in a newspaper page which is lacking in either of the other tones.

Not all newspapers, of course, fall into these three distinct classes. There are papers such as the *New York Times*, for instance, that, while in general employing the contrast tone, lean slightly toward a conservative grayness in reflecting a paper that is soberly and sanely presenting "all the news that's fit to print." There are others such as the *New York Telegram* and other Scripps Howard papers that, while also contrast-tone papers, lean toward a little more blackness, for they are vigorous, crusading papers, seeking to arouse the public to action. A newspaper's type dress can be made to impress at first glance the character of the paper upon the reader.

### HEADLINE LEGIBILITY

Until recent years little thought was given to the readability of different headline faces. Most papers used some variety of condensed or extra condensed Gothic, which permitted the greatest number of units possible in a line. But a tall narrow letter is hard to read because the eye is not accustomed to letters of that shape, and when series of such letters are crowded together in a line, a newspaper achieves the maximum of illegibility. Observe the specimens on the opposite page.

Crowd any of these headlines a trifle, as often happens in trying to squeeze an idea into the narrow limits of a column, and the words will be run together so that they are almost unintelligible. If there is any grouping of letters that ought to give

up its idea quickly and with a minimum of effort, it is the newspaper headline, yet most newspaper headlines are exceedingly difficult to read.

MRS.WILLEBRANDT TACTICS IN PROBE ROUSE BORAH'S IRE

Uses Undercover Agent in Effort to Oust Atlanta Warden, Is Charge.

LA FOLLETTE FACTION LOSES TWO PLACES ON NATIONAL COMMITTEE

GEORGE VITS AND MRS. HARRY THOMAS TO REPRESENT STATE ON G. O. P. BOARD

EKERN AND MC CORMICK OUSTED FROM COMMITTEE

F. T. Denman of the Mergenthaler Linotype Company, writing in a recent issue of *The Linotype News*, shows what happens when condensed letters are crowded in headlines.

> Every so often, in reading newspaper headlines, we come across a line that has been so crowded together that it looks like this:

TOERRISHUMAN

But this is just a meaningless succession of letters. To get some sense out of it we must break it up, so we start back looking for words. Breaking off the last syllable we get this:

TOERRISHU MAN

Can it be something anthropological? Possibly; but let's try again. Perhaps it is a name:

TOERRI SHUMAN

Then remembering the headline writers fondness for nicknames and abbreviations we wonder if it might be this:

TOE R.R. IS HUMAN

No that isn't it, but it gives us our clue:

TO ERR IS HUMAN

We can only complete the quotation by extending divine forgiveness to the erring human who devised such an illegible head and who compelled us to waste our time puzzling it out.[1]

### THE CHANGE TO UPPER AND LOWER CASE

The *New York Herald Tribune* was the first paper to break away from the old tradition of "all cap" headlines. It was followed shortly by the *Milwaukee Journal*, the *Minneapolis Tribune*, and many others. But the great majority of newspapers still persist in setting at least the top decks of all headlines in caps. As an entering wedge, however, feature heads in upper and lower case have begun to appear in many papers. A few have gone so far as to set all their single-column heads in upper and lower case, but they retain the capitals for their larger two- and three-column display heads. The smaller city papers have been quicker to make the change to upper and lower case than the metropolitan papers.

[1] *The Linotype News*, August, 1927.

The difference in legibility between upper and lower case and the all-cap head is demonstrated by Mr. Denman in the article quoted above. Taking the same headline, he has it set in upper and lower case, showing how its meaning is clear at once even if the letters are crowded together, as often happens when the head writer lets a head slip by with too many characters.

> ToErrIsHuman
>
> It is still perfectly legible.
>
> IF YOU THINK THAT CAPS ARE EASY TO READ, JUST TRY READING THEM FOR A WHILE OR TRY SETTING THE NEWS COLUMNS OF JUST ONE ISSUE OF YOUR PAPER IN ALL CAPS AND SEE HOW MANY PEOPLE READ IT. THE DIFFERENCE LIES PARTLY IN THE FACT THAT A LINE OF CAPITALS IS BOUNDED TOP AND BOTTOM BY PARALLEL LINES, WHILE LOWER CASE HAS UP AND DOWN LETTERS THAT GIVE THE EYE SOMETHING IT CAN CATCH HOLD OF.
>
> There that's over! And what a relief it is to get back to lower case! If it is easier to read lower case letters in a solid column, it is correspondingly easier to read them when there are only two or three lines, as in a heading.
>
> An added reason for lower case heads is that they give more characters to the line, or the same number of characters in a less condensed and thus more readable face.
>
> The only excuse for cap heads is tradition and it is a bad tradition that is rapidly passing out.[2]

The legibility of the all-cap headline is bad enough in one-column heads, but when lines of capitals are run over two or three columns they become proportionately harder to read. Compare the two headlines on the next page. The first, chosen

[2] *Ibid.*

BOARD LAYS I. R. T. WRECK TO MAN FAILURE;
POLICE BLAME EMPLOYE; HE IS HELD IN BAIL;
HEDLEY SAYS CITY SHARES SUIT LIABILITY

# French Agree to Navy Cut Set by Britain for Powers; Commons Cheers Kellogg

from a great New York paper, is almost a meaningless jumble of letters, unless, by careful concentration, the reader analyzes each line to determine where the break between words should come.

Now glance at the three-column headline of almost the same form chosen from the *New York Herald Tribune.*

Both heads are intended as leading first page display heads to attract readers. The upper and lower case head can be read with ease twenty-five feet away; the all-cap head can hardly be deciphered when one has the paper in his hand.

The contrast is even more apparent in single-column heads of the same size.

GENERALS GATHER TO SWAY CHOICE OF MEXICO PRESIDENT

Congress, Meeting Saturday to Replace Obregon, Will Face Delicate Task

Creeping Army Worms Ravage Badger Crops

Rain Checks U. W. Men In Battling Pests In Ozaukee Co.

The all-cap headline is set in 30-point News Gothic, whereas the upper and lower case head is set in 24-point Bodoni Bold, thus

giving the former a 6-point advantage in size. Yet the latter has many times the attention value and is much easier to read. An interesting point is that the letter count in both heads is almost the same; both permit 13 to 14 units, but the lower case head in the same space accommodates a much more expanded face and is therefore more easily read.

The advantage does not stop with readability or letter count. The upper and lower case head is also much more attractive and interesting to look at. An all-cap headline is formal, austere, and severe. Upper and lower case heads are warmer and friendlier; they give any page a more inviting appearance.

There is no argument for the all-cap headline except custom and tradition. While this form of headline may survive with the conservative papers, the more progressive papers, in increasing numbers, in the next few years, will adopt the upper and lower case headline. Its advantages from the standpoint of readability and greater attractiveness commend it to all newspapers.

## Headline Faces

The second great headline development in recent years has been the abandonment by many papers of the Gothic and other equally unattractive condensed faces which have been entrenched on American newspaper pages for decades.

The majority of American newspapers, it is true, still use some form of Gothic or Cheltenham condensed, but each year more of them are breaking away from these traditional faces and are producing more attractive newspapers with some of the better faces now available on composing machines.

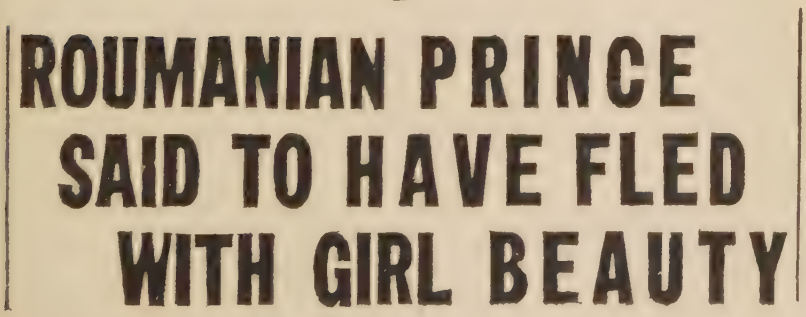
### THE GOTHICS

The utter lack of either beauty or interest, the dullness and monotony of these block types, has already been discussed in Chapter VI. The appearance of American newspapers would be immeasurably improved if every piece of Gothic type in our composing rooms were melted up and done away with. The condensed forms ordinarily used in newspaper headlines are extremely hard to read, and the blackness and monotony of the wider and bolder forms give any newspaper page a mournful, funereal appearance.

The examples below illustrate some of the varieties of Gothic to be found in various newspapers.

A

B



C

# U. S. GIVES FULL RECOGNITION TO CHINA REGIME

State Department Sends Notification to National Leaders at Nanking

TARIFF CAUSED MOVE

Coolidge Accepts Ruling That Signing of Treaty Constitues Acknowledgment

D

# Courtesy Rebuffed, Officer Suspicious; Makes Liquor Haul

Cargo of 151 Gallons of Alcohol Seized, Two Men Arrested in Madison

Not by any stretch of the imagination can there be said to be anything of interest or attractiveness, certainly nothing of beauty, in such type faces. Example C is perhaps the most legible. Its top deck is plain and simple—there is that to commend it—but it is not good to look at. It is dead, wooden, and without any interest appeal. When papers cover their front pages with two- and three-column spreads in bold Gothics, as in Example B—a practice found on many Hearst evening papers—the heads are too irritatingly black to make it easy to read the text matter below them.

Editors of papers that make their appeal largely to the masses declare that they must use glaring headlines in order to get the attention of their class of readers. Gothics, it is true, have a certain character of brute strength, but it is hardly necessary to knock a man down to get his attention. The reader of the mass-type paper buys it not because of the Gothic types it is dressed in, but because of the kind of news and feature matter it presents. He may not know one type face from another, but if he is a normal human being he has an innate appreciation of beauty, and he would enjoy his newspaper more if it were dressed in more interesting and attractive type. If strong display is necessary for this kind of paper, there are many other faces just as strong as the Gothics and much more attractive.

Norman J. Radder, in his *Newspaper Makeup and Headlines,* has pointed out that mass circulation in the magazine field is not incompatible with good typography. He cites Hearst's *International,* now combined with *Cosmopolitan,* the *Saturday Evening Post,* and the *American Magazine* as having attained huge mass circulations while constantly improving their typographic appearance.[3]

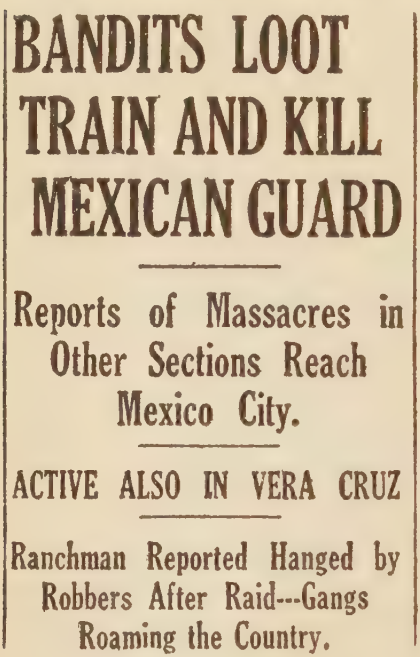
The newspaper man has at his command so many other faces more effective in commanding attention and in creating interest that there is no excuse for using Gothic type in newspaper headlines.

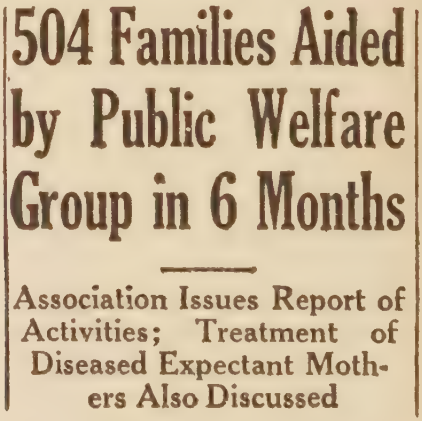
### THE CHELTENHAMS

Next to Gothic, Cheltenham is probably the most popular headline type face. Cheltenham Bold, Medium, and Oldstyle are

[3] N. J. Radder, *Newspaper Makeup and Headlines,* p. 141.

quite readable and make good headline faces, but in their attempt to crowd as many units as possible into a line, most newspapers using Cheltenham have adopted a condensed or extra condensed


BANDITS LOOT TRAIN AND KILL MEXICAN GUARD
Reports of Massacres in Other Sections Reach Mexico City.
ACTIVE ALSO IN VERA CRUZ
Ranchman Reported Hanged by Robbers After Raid---Gangs Roaming the Country.


504 Families Aided by Public Welfare Group in 6 Months
Association Issues Report of Activities; Treatment of Diseased Expectant Mothers Also Discussed

variety of this face. In its condensed forms, shown above, Cheltenham is ugly and almost as hard to read as some of the condensed Gothics, particularly when set in lines of all capitals.

LATEST **THE MILWAUKEE JOURNAL** LATEST

Forty-seventh Year — Friday January 11, 1929 — 42 Pages Latest Edition

# 7 Killed in Question Mark's Sister Ship

## *Blizzard to Sweep Snow Ridden City, State*

### 40-Mile Wind to Drive Mercury to Eight Below

Wisconsin Highways Booked Over Wide Area as Drifts Fill Plowed Roads

Temperature Begins Drop Here; Rail Forces to Maintain Clear Streets

PRACTICAL WORKERS IN EVERY CABINET MATERIAL
HOOVER
HOOVER
HOOVER

gray newsprint. The more expanded letters disclose a greater variation of stroke, the serifs become pronounced enough to give more character to the face. Cheltenham in this form comes into its own as a good, plain, easily readable face.

The *Milwaukee Journal*, which has been one of the leaders in better newspaper typography, has adopted Cheltenham Bold and Cheltenham Medium for its headline schedule and has achieved one of the most interesting and easily read newspaper pages in the country. Setting its heads in upper and lower case, with plenty of white space between lines and decks, it has created the effect of an open door in each of its headlines, inviting one to come in and read. Examples of its headlines are shown below.

**$2,500,000 Park Plan Is Proffered to County**

**Commission Suggests That 3,872 Acres Be Purchased by Bonds**

**U. S. Will Seal Cars in Fight on Smuggling**

**Close Check Expected to Stop Flow of Canadian Liquor; Fat Graft Traced**

The pleasing effect created by this type dress can readily be observed by studying the reproduction of a *Milwaukee Journal* front page on page 175.

Patronize Our Advertisers Tell Them You Saw Their Ad In THE STAR.

# THE WEST ALLIS STAR

THE ONLY NEWSPAPER PRINTED IN WEST ALLIS.

Largest Paid-Up Circulation in WEST ALLIS and Vicinity.

VOL. 33 No. 32 WEST ALLIS, WISCONSIN THURSDAY, JULY 18, 1929 PRICE 5 CENTS OFFICIAL CITY PAPER, 5c Per Copy

# Council Debates Water Rate Fight

## Council Asks Bids on Water Storage Tank

Plan Completion of Tank System in Six Months; Build Near Garfield School

## New Jr. High Plans Ready

Select Location Next to Washington; To Cost $360,000

## Firemen Frolic at First Annual Lake Outing

## All Broken Out

By Albert T. Reid

## New Concern Buys Land to Build Plant

Chas. Hansen, Dairy Products Laboratories to Build Plant on Leonard Site

## Owls' Band to Present Park Band Concert

## Await Reply of Railroad Commission

Council Splits When Attorney Issue is Raised; Some Would Hire Extra Aid

## Record Crowd Attends Parks

Record Attendance of 13,000 Listed at City Parks

## P.T.A.'s Visit Sanitariums

Anti-Tuberculosis Association Host to Local Women

## Improve City Hall Office

## On to W. Allis, Kiwanis Cry

Put on Steam is Order to All Committees Dist. Meet Nears

## Raid Victims Face Federals

State Also to Bring Gambling Charges; Violate Jones Act

## Sterling Motor Shows Increase

## Set-Back Case to be Heard in Fall

## Douvilles, Early Settlers, Celebrate Golden Wedding

## Circus Beckons Youth to New Job; Found in Oshkosh

## Cong. J. C. Schafer Opens Office

## Local Dealers Get Coal Contracts

## Travels 1,000 Miles in Less Than Day

## St. Rita Parish to Hold Picnic

## Local Man Drops Dead in Park

## Races at State Fair Park Sunday

## 4-H County Show to Open August 12

## Eckert-Ward Co. Employees Picnic

A CHELTENHAM MEDIUM HEAD SCHEDULE

As illustrated in the *West Allis Star*, it makes a good type dress for the weekly or small city daily.

The possibilities of a Cheltenham Medium schedule for the small city daily or a weekly paper are illustrated by the front page of the *West Allis Star* reproduced above. This paper won first prize in Wisconsin in 1929 for its typography and make-up. Note how each head stands out distinctly, and the nice balance that can be achieved with this face.

BODONI

The *New York Herald Tribune,* which was the first of the great metropolitan papers to break away from the traditional Gothic, chose Bodoni Bold in upper and lower case as its headline dress. Observe what an attractive effect the all-Bodoni schedule creates in the *New York Herald Tribune* page reproduced on page 313. Bodoni has since been adopted by a number of other newspapers and promises to become one of the most popular of newspaper headline faces. Examples of Bodoni headlines are shown below.

**Tropic Storm Lashes Coast; Vessels Upset**

**Beaches Damaged All the Way From Maryland to Sandy Hook; New Gale Reported Bound North**

**Five in Motorboat Missing Off Jersey**

**Fishing Sloop Is Cast Up at Coast Guard Station in Twelve-Hour Drift**

Bodoni Bold is a face particularly adapted to newspaper headline use. As has been explained in the chapter on type faces, Bodoni is probably the most contrasting and colorful type available today, with its combination of fine crosslines and heavy black down strokes. It is a crisp, sharp, quick, vigorous looking face. It gives life to any newspaper page, for Bodoni headlines

fairly sparkle. At the same time it possesses a good deal of dignity and gives a newspaper page the appearance of being well dressed.

Bodoni is at its best in the standard width and in upper and lower case. The condensed Bodoni headline shown below appears very severe and strained. In the all-cap headline below there are too many sharp, crisp serifs and brackets. The many sharp points dazzle the eye and make the headline hard to read.

**Restricted Migration From Mexico Urged By Senator Harris**

**Southwest Is Not Entitled to Exclusive Supply of Cheap Labor, He Declared.**

***'DID, DIDN'T' OF CLERK CANDIDATES ENLIVENS LABOR BODY'S MEETING***

In its upper and lower case form, however, as used by the *Herald Tribune,* Bodoni makes an excellent headline type. It is very legible and looks interesting. Its black down strokes form an effective contrast to the gray body type and make the headlines fairly stand out from the page. Bodoni headlines beckon the reader right into the story and give the whole paper a distinctive appearance.

While Bodoni is a rather wide letter, it nevertheless gives a good headline count. There is no need to use 36- or 42-point type, as is necessary with condensed Gothics, to obtain emphasis in single-column decks. A 30-point Bodoni headline has more attention value than a 42-point head in News Gothic, and its

headline count is just as good. A 30-point Bodoni head will permit 11 units in a single 12½-em column drop-line, while 24-point will permit 13 to 14 units, either one of which is adequate for most headline purposes.

Bodoni is available on all composing machines. It is having a marked revival among advertising typographers, and some predict that it will soon be the most popular of all faces for both advertising and news headline purposes.

### CENTURY

Another good headline face is Century. Theodore Lowe De Vinne, who was one of the greatest authorities in America, considered Century the most easily read type face ever designed.

**Average Rent Rates in U. S. Show Drop**

**Declared 13½ Per Cent Lower Than Post-War Peak.**

The *Minneapolis Morning Tribune*, which, with the *New York Herald Tribune* and the *Milwaukee Journal*, was among the pioneers in better newspaper typography, chose Century Oldstyle Bold for its principal news headlines. This face is a good display letter and has all the legibility of the Cheltenham used by the *Milwaukee Journal*, but has more attractiveness and character. There is more differentiation between the thick and thin strokes; its serifs are sharper and crisper. The letter forms are quite graceful, and the weighted shadings in its looped letters give it the easy charm of oldstyle faces. It combines the grace of the oldstyle with the brisker manner of the modern. Its ascenders are shorter than the Cheltenham, and the body letters are correspondingly larger, giving them a large, round, open face which accounts for the legibility of Century. The typography of the

*Minneapolis Tribune*, as exemplified in the reproduction shown on page 183, is one of the most attractive in the country. Study it.

For detailed study a headline specimen of Century Oldstyle Bold Condensed, used by many country weeklies and small dailies, is shown below.

# County Leads All Others In Testing Clubs

## Cow Testing Members of District To Meet at Barron in November

### Records of Cows in Clubs of County Gratifying to the Association

While Century Oldstyle makes a most attractive headline, it may be a trifle too quiet and subdued for many papers that feel they must shout their wares more loudly. In that event, either Century Oldstyle Bold or Bold Condensed will provide the emphasis and depth of color desired. Or one might well turn to the plain Century Bold, which by its very straightforwardness always seems a bit more emphatic. This is an entirely modern face and has a little more snap than the oldstyle. It is not, however, quite as graceful and attractive as the oldstyle. Many feel that it has a more mechanical and commonplace appearance than the latter. It does, however, make a good, strong, legible headline, as may be judged from the examples on the next page.

Century is preferred by many to Bodoni because it does not have as many sharp points. The ends of its letters are a trifle

more rounded, and its lighter strokes are slightly darker in proportion to the heavy strokes than is true of Bodoni. As a

bold display face, it may be better than Bodoni but it does not have quite the sparkle and interest of the latter.

### ADVERTISING FACES FOR HEADLINES

The four faces discussed thus far in this chapter are the principal ones being used for newspaper headlines, but there are a number of the others discussed in the chapter on Type Faces that could be used just as well. The surprising thing is that newspapers have persisted in using the Gothics and the Cheltenhams when there are so many more attractive faces available. Advertising typographers are years ahead of the newspapers. In response to the demands of advertisers, newspapers have put into their composing rooms, both in type cases and composing machine magazines, many of the good advertising faces. Yet the newspapers have not availed themselves of the faces in their own composing rooms. Many of these good faces are available on both linotype and intertype, so that heads in these faces could be easily set by machine.

The Minneapolis Morning Tribune

Twenty-six Pages MINNEAPOLIS, MINN., TUESDAY, OCTOBER 8, 1929. Price Three Cents in Minneapolis.

TAKE PARITY! PREMIER SHOUTS

Everybody's Business

Southern California Tourists Aid Growth, Los Angeles Banks Scientific Farming.

By John P. Sheridan

Weather Forecast.

News Index

Chicago Fans Tense on Eve of Big Series

City Seethes With Excitement Over Battle of Cubs, Macks.

Brainstorm Word Baseball Classic First Time in 10 Seasons.

Root and Earnshaw Seen as Starting Pitchers in First Game.

Policeman Wounded in Alley Battle With Mysterious Assailant

Enemy Tribemen Menacing Throne of Water Boy King

Shot in Thigh Officer Staggers to Hospital and Falls Unconscious.

Bullet Crashes Through Window and Narrowly Misses Abbott Nurse.

Circuit Court Upholds S. E. Zone Verdict

Rules City Can Enforce Prospect Park Residential Area.

Spokane Bank Is Taken Over by N.W. Group

Two More Montana Institutions Also Join Bancorporation.

May Steal Once to Stay Hunger

Stillman, Reported Missing, Located

Mellon Promises to Stay Until 1933

Bambridge Colby Divorced by Wife

U. S. Glider Record Set in Hour Flight

Coalition Wins Second Tariff Tilt in Senate

Independent Republicans Help Democrats Defeat Valuation Item

Only One Democrat Supports G.O.P. Regulars, Who Lose 10 Votes.

Ballot Shows Opposition to Rate Program Is Still Intact.

Searchin N.Y. Fails to Find Morrie Miller

Check-Up at Address Given by Gunman's Lawyer Proves Fruitless.

Says Naval Parity Plan Is Accepted

Ramsay MacDonald

Finn Starts Serving Time in Stillwater

Oil Office Holdup Man Sentenced to 8 to 40 Years.

Bandits Take $135 in Two Robberies

Judge Dies in Fall Through Canopy

Declares War of U.S., Britain Is Impossible

MacDonald Explains Aim to Enthusiastic Crowd in Senate Chamber.

Says Understanding of Two Nations Has Come From His Visit.

Tells Congress Stresemann Was Heroic Man, Playing the Game.

MacDonald Honor Guest at First State Dinner

A CENTURY OLDSTYLE TYPE DRESS

It is an encouraging sign that many news editors are beginning to dip into the type cases and the magazines, heretofore used only by the advertisers, to experiment with new and more interesting faces for headline display. Already the results can be seen in better looking newspaper pages.

CASLON

One of the types that is finding favor is Caslon, foremost among the advertising faces. It will be recalled that this face was used by nearly all of the early American newspapers, but fell out of use when the moderns came into vogue. It was revived about sixty years ago and has grown steadily in favor with advertisers, but has not found its way back into newspaper columns to any extent.

A number of small city dailies and quite a few weeklies are using a Caslon Bold Condensed for their complete schedule of news heads. Recently a few of the larger newspapers have been experimenting with Caslon. The *Minneapolis Tribune* uses a Caslon Bold for some of its spread heads to contrast with the Century Oldstyle in its single-column heads. The *Chicago Daily News* is using a very attractive two-column feature head in Caslon Oldstyle. Caslon Bolds and Caslon Heavies are finding their way into inside streamers on several larger papers. Caslons are to be found quite frequently in the feature heads of Sunday magazine sections. The following heads illustrate the possibilities of Caslon for both news and feature heads.

# Supreme Court Decides Problem of Insurance

## The Fourteenth Amendment of the Constitution Is Not a Guarantee Against Free Competition," Justice Butler Rules

*(This is another article in a bird's-eye view of the work of the United States Supreme Court during the past term.)*

**By Gregory Hankin**

surance companies was likewise held invalid, in so far as it imposed a tax on income derived from Government securities. The State imposed a gross receipts tax of 3 per cent. as an annual license fee for transacting business in the State. The insurance companies maintained that the tax was illegal in

Advertisers rate Caslon as the most serviceable and versatile of all type faces. No other face has such a pleasing variety of effects and comes so near to pleasing all kinds of tastes. In its

# Kellogg Calls Pact Step To Civilization

## He And Canada Premier Given Civic Welcome At Plymouth.

## Foregoes Oratory

## Secretary, Not To Speak 'Much' At Meet In Paris.

bolder forms it makes an excellent display face of moderate strength. In its lighter forms its effect is very feminine and it can be used with excellent effect on women's and society pages. In any form it is a good looking and very legible face.

The one trouble with Caslon, from a headline standpoint, is that it is too wide-shouldered. If a careful study is made of the specimens of either Caslon Oldstyle or Caslon Bold in Chapter VI, it will be seen that there is considerable space between each letter. Because of this wide shoulder the letters do not fit close together. Hence, Caslon single-column heads do not permit a convenient letter count unless set flush to the column rules on either side, and such heads are usually not very attractive because of lack of white space.

Newspapers using Caslon for regular news heads therefore employ a condensed series; if the regular widths are used, they are reserved for two- and three-column spread or feature heads in which there is plenty of room for the wider letters.

Caslon makes a very legible headline. Its bold is sufficiently

strong for any newspaper, and its oldstyle series adapts itself to the conservative feeling of any gray-toned papers. Many of these papers, in fact, could improve their appearance, at the same time keeping their conservative tone, by discarding their News Gothics and using Caslon Oldstyle or Century Oldstyle instead.

### CLOISTER

Cloister, a face of real beauty and character, is rated by advertisers as having almost as wide a range of appeal and usefulness as Caslon. It is representative of the irregularly or classically designed type faces and has the appearance of being hand drawn or hand cut, which gives it distinction and character. Cloister Oldstyle is perhaps too light for headline purposes, but Cloister Bold is splendidly adapted for this purpose. It is the steadiest of the classic faces and is perhaps the most interesting and attractive of all faces available for news headlines.

Furthermore, it is very practical. In selecting any type face for headline purposes, two factors, legibility and letter count, must be considered. Cloister Bold satisfies both of these requirements to a marked degree. It is one of the most easily read of all type faces, and at the same time its letters fit closely together and permit a higher letter count in headlines than do most faces. The specimen lines below show graphically how much more concise is Cloister than any of the other faces.

**Public Opinion** *Cloister*
**Public Opinio** *Bodoni*
**Public Opinio** *Cheltenham*
**Public Opinio** *Goudy*
**Public Opinio** *Caslon*

Even a 30-point top deck will permit 13 units in a single-column drop-line, which is more than any but very condensed faces will accommodate, and Cloister does it without any squeez-

CLOISTER OLDSTYLE BOLD MAKES A HEADLINE TYPE DRESS OF GREAT ATTRACTIVENESS

ing of its letters into thin, unnatural, condensed shapes. What is more, the closeness of its letters does not interfere with its legibility.

With its clarity, Cloister combines a mellowness and beauty of form and a strong uniform tone that commend it for news-

paper headline use. Cloister will lend a force and beauty to a page which hardly any other face can duplicate.

# Chinese Fire on Russians as

## Nanking Completes Break With Russia

Gestures of War Continue As Council Recalls All Envoys to Soviet Union

BULLETIN

Americans Believe Kellogg Peace Treaty Already Has Cut Chances of War

By HERBERT LITTLE

## Four Stricken By Poison in Food, Drink

Madison Couple, Lone Rock People in Hospital; Doctors Puzzled By Case

## Safety in the Air Is New Aim of Fliers, Says Lindy

The attractive appearance and easy reading qualities of Cloister headlines can be readily seen in the specimens shown for detailed study above.

Observe the *Wisconsin State Journal* page reproduced on page 187. The Cloister headlines give a charm and legibility to this page, which is very inviting. The page might have been improved had the banner been set in Goudy Bold and the second line in Goudy Bold Italics, both of which are much more closely related to and would have been more harmonious with the Cloister heads than the Cheltenhams used. One interesting thing about Cloister is that, while the letters lock closely together, the shoulder above and below the body letters is a bit wide to allow for the long ascenders and descenders. As a result, the lines of every head are well spaced, and the whole newspaper page presents an inviting openness because of the light that shines through its heads.

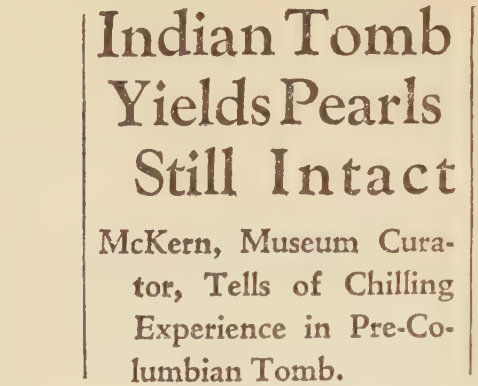
Though Cloister is available on both linotype and intertype and is widely used by advertisers, it has been adopted by only a few smaller newspapers for headline use. Metropolitan papers declare that it is not quite emphatic enough and point out that its ascenders are taller and its body letters smaller than in many other faces. Cloister, however, will permit 30-point to be used where only 24-point can be used in other faces, so that plenty of emphasis can be obtained. The obvious advantages of Cloister presage its adoption by many newspapers as a headline face.

### GOUDY

Two members of the Goudy family, Bold and Bold Italic, are finding considerable use in newspapers. Both make excellent headline types. They belong to the same group of classic faces as Cloister, but are stronger than the latter. Their characterful letter formations and their depth of color make interesting and attractive heads.

Newspaper editors first seized upon Goudy Bold Italic for secondary front page lines because it made an excellent contrast to almost any type used for the banner, as can be seen in the first example on page 191. Note how the banner and the secondary line stand out individually.

Then they began experimenting with Goudy Bold with equally good results. In fact, they found that Goudy Bold was strong enough to serve as a banner and that its italic made an ideal companion as the secondary contrast line. The combination of




*Goudy Bold in a Single Column Head*

two sizes of Goudy Bold, as shown in the *Sheboygan Press* headline reproduced on page 191, demonstrates what a characterful and attention-getting banner this face will provide.

Next, some of the papers that did not use banner heads discovered that Goudy Bold made an excellent and forceful face for its lead spread heads, as illustrated in the section of the *Cincinnati Commercial Tribune* page shown on page 192.

From the front page, these two faces have made their way into the newspaper as inside page ribbons, as special department headings, and as feature heads. Several papers are using either Goudy Bold or Goudy Bold Italic for headings in their Sunday feature sections. And they make an excellent headline in almost any arrangement. Observe the specimen heads from the *Milwaukee Journal* on page 193.

Goudy Bold, however, has one disadvantage. It is a little too wide and fat to permit a good count for single-column headlines. Goudy Catalogue, on the other hand, though lighter in weight is a little better adapted. Its letters lock together more closely and permit a better looking single-column head.

While Goudy Catalogue is probably a bit too gray-toned for daily papers, it makes an excellent type dress for a weekly. Witness the *River Falls Journal* on page 194.

Unfortunately the Goudy faces are not yet available on either the linotype or intertype, hence their present use is limited to special and department headings, lines and ribbons where hand-set heads are practical.

**Today**

Germania Rules the Waves
Mopping Up Speakeasies
Are You Shy?
By Arthur Brisbane

# Mercury Hits 92; Relief Today

## *U. Employes' Pay Roll Held Up; Blame Officials*

**Summer's Heat Mark Is Broken**

VOL. XXII. NO. 196 SHEBOYGAN, WIS., TUESDAY, AUGUST 6, 1929 PRICE 3 CENTS

# NEED GREATER PRISON FUND

**Conditions In Prisons**

## Unfavorable Winds May Delay Zeppelin's Flight

# RIBUNE

T.E N. Y. WORLD


**THE WEATHER**
FAIR AND COOLER.
Thursday Fair.
TEMPERATURE YESTERDAY:
Maximum 90. Minimum 62.


Entered as second-class matter June 25, 1896, at Postoffice, Cincinnati, Ohio, under act of March 3, 1879.

PRICE TWO CENTS.


# FIRE ENDANGERS GREAT FORESTS; FIGHTER KILLED

## Armies of Men, Combatting Flames on Pacific Northwest, Believed To Be Gaining Control—Situation Is Improved.

## HEAVY RAIN ONLY HOPE IN BRITISH COLUMBIA

## Tourists and Hunters Barred From Entering Danger Zone —Directors of Defense Riding Planes Over Battle Fronts.

SEATTLE, Wash., Aug. 13.—(AP)—Armies of men today were believed to be gaining the upper hand over forest fires which were menacing millions of acres of timber in the Pacific Northwest. Forest protection officials reported the situation showed signs of improvement.

Reports brought news of the second death in a week due to forest fires. C. S. Hatton, 35, of Sedro Wooley, was killed when a 125-foot burning snag he and Fran Arnold, also of Sedgo Wooley, were guarding, crumpled and fell on them. Arnold escaped with injuries to his right leg.

A thousand-acre fire near Haney B. C., was raging uncontrolled after sweeping over Golden Ears Mountains and Golden Valley. A hundred loggers, exhausted from a twelve-hour continuous battle, were trying desperately to save logging equipment. Officials of the Abernethy Lougheed Logging Company were keeping their men some distances from the flames, preparing to lose timber rather than endanger human life. A heavy rain was the only hope of quenching the fire.

**Fighting Lines Extended.**

In the Colville National Forest in Eastern Washington 450 men were extending their lines to halt the Barnaby Creek fire, which has swept 12,000 acres and was still spreading slowly. Fires in the Kaniksu Reserve and near Sand Point, in Northern Idaho, were quieted.

All the fires in the Chelan National Forest in Washington except one were under control. The fire, still out of bounds, was on the northeast shore of Lake Chelan on the summit between the Chelan and Methow valleys. Crews fighting it

# Republicans Name Candidates Chosen For City Council

## Standard Bearers Are Drawn From City's Business and Professional Men—Ticket To Be Given to Committee Tonight.

## TWO JUDGES ARE LISTED AMONG 9 CHOICES OF G.O.P.

## Present Member of Governing Body Is Again Recommended for Election This Fall—Former City Treasurer Included.

Nine men prominent in the public affairs of Cincinnati, were mentioned last night by the Republican Nominating Committee as candidates for membership in the City Council.

The slate will be submitted to the Republican Advisory Committee, composed of ward captains, at a meeting at 7 o'clock tonight in the auditorium of the Republican Club, 136 East Ninth street, and at 8 o'clock at a meeting of the City Central Committee, composed of the 500 precinct executives of the city of Cincinnati.

At the same time the Republican platform, which probably will be completed some time today, will be submitted. The Platform Committee consists of Mr. Schneller, as Chairman; Ed. D. Schorr, State Director of Commerce; Nelson J. Cohen, Gen. P. Lincoln Mitchell and Former Judge Walter M. Shohl.

**Nominating Committee.**

The Nominating Committee, responsible for the recommendations decided upon last night, consists of Bolton S. Armstrong, Joseph H. Assel, Ferd Bader, Jr., Miss Cora M. Box, Harry W. Brown, Nelson J. Cohen, E. W. Edwards, Julius Fleischmann, Philip O. Geier, Miss Antionette Jackson, Carl M. Jacobs, Jr., Mrs. William Jerome Kuerst, Harry Leyman, Gen. Mitchell, George Puchta, Paul Schirmer, Judge Shohl, Robert A. Taft, Mr. Schorr and Mr. Schneller.

Alphabetically listed, the Nominating Committee gives the following names: Martin Daly, H. F. Dornette, Max Friedman, George R. Hauser, Alex Patterson, Conrad Rehmann, Jr., Eric L. Schulte, Judge Joseph H. Woeste and Judge W. Meredith Yeatman.

## UMPIRE IN HOSPITAL, HIT BY POP BOTTLE

COLUMBUS, O., Aug. 13.—Joseph Rue, American Association umpire, was in a hospital here tonight suffering from concussion of the brain received in a free-for-all fist fight at Neil Park late today during the ninth inning of the Columbus-Milwaukee game.

Rue was caught in a deluge of spectators who rushed from the stands when plate umpire Larry Goetz ordered the Columbus bench cleared of all players except those actually in the game. A pop bottle is believed to have caused the injury.

Joe Carr, baseball magnate, stopped a flying fist with his jaw and several other unidentified persons were cut and bruised before police could quell the spectators.

Goetz ordered the Columbus bench cleared after he charged that some of the players were "razzing" him because he had ordered a Columbus player from the game. Only one uniformed officer was at the park when the fight started.

# APATHY MARKS OHIO PRIMARY IN BOTH PARTIES

## Jackson Defeated for Renomination in Toledo—Curtis Wins in Canton—Hamilton County Towns Cast 2,300 Votes.

# Martin and Osa Johnson Shot Wild Animals—With a Camera!

## *Three Slips of Paper Play Vital Part in the Lives of These Modern Misses*

In either bold or bold italic, goudy makes an excellent feature headline

TRY OUR JOB DEPARTMENT
For Printing of the better kind at reasonable prices. Phone 29

THE RIVER FALLS JOURNAL

VOLUME 73 RIVER FALLS, PIERCE COUNTY, WISCONSIN, THURSDAY, JULY 18, 1929 NUMBER 23

PATRONIZE JOURNAL ADVERTISERS
They always offer you the best merchandise for the least money

## Crop Prospects Appear the Best For Many Years

### MONSTER HAY CROP ALMOST ALL CUT—OTHER FIELDS LOOK GOOD

### Poor Crop Prospects in the West Indicate Exceptionally Good Prices This Year

The River Falls neighborhood will have one of the best crop years for some time if fallow continues to look as good as they do right now. A splendid hay crop is already almost all in and every body seems busy and quite pleased at the prospects for everything looking so promising. Reports from the West groups say that it is not yet to late to plant wheat and with the heavy yields should bring a lot of money as the farmers of the common and improved varieties could sow generally.

A summary of the crop situation for the entire state released Tuesday afternoon this week by Harold M. Thysse agricultural statistician of the Federal-State crop reporting service gives the following information:

Increases and Decreases

Both increases and decreases in this year's Wisconsin crop production as compared with last year are indicated in the July report of the Crop Reporting Service of the United States and the Wisconsin Department of Agriculture at Madison. The Estimates show that this year compared with last, oat crop acreage should decrease more than 5 per cent, and production will probably exceed last year's production. Wisconsin will probably raise more barley and rye this year than last year. Hay crop prospects are unusually good. Pasture conditions are reported to be about 5 per cent poorer than last year. Crop prospects have had favorable growth and development and acreage has been planted in March, are reported to be somewhat above the ten year average. Spring wheat acreage is estimated at 60 per cent below last year's acreage. Winter wheat acreage is estimated at 80 per cent above last year's acreage. Indications of the acreage which will be harvested for grain, winter wheat, 80 per cent; spring wheat, 60 per cent; barley, 95 per cent; and rye, 105 per cent, according to reports received by the crop reporting service.

Prospects for the production of fruit are very encouraging. Conditions are reported to be about 10 per cent better than last year. Prospects for the production of potatoes are reported to be somewhat above the ten year average, with the acreage planted in March, and the prospects for good yields being favorable. The acreage planted is estimated at 90 per cent of last year's acreage

### HEADLINE FACES FOR WOMEN'S PAGES

An interesting development during recent years has been the tendency on the part of some newspapers to copy a leaf from the advertisers and to use type faces that have proven particularly feminine in their appeal on the pages published particularly for women.

Garamond and Kennerly, for instance, long have been used by advertisers for an appeal to women, and they are equally as good as headlines on women's and society pages. Caslon is used by some papers. A few use Cheltenham Oldstyle or Century, but these, while clear, legible, and light enough in tone value, do not have the feminine grace and appeal of Garamond or Kennerly. Compare the appeal in the examples below and on the following pages.

*Garamond*

Slimness Still
Is Sought For
Most of Modes

Greens, Pastel Shades Are
Seen on Numerous
Occasions

*Century*

Gen. Pershing
Joins Newport
Colony Today

Mrs. Stuart Duncan to
Give Large Dinner
Tonight.

*Cheltenham Oldstyle*

# Society to Show Mounts in Arena at State Fair

Foremost Stables of Country to Enter Prize Horses in Big Events, Arranged for Five Nights Beginning Aug. 27

*Caslon Bold*

## Lake Hopatcong Season Reaches Its Height

**The Henry Sawyers Give Benefit Euchre for Cripples**

*Kennerly*

# To Succeed, Know the Public, Is a Rule of Woman Editor

Dakota City Publisher Carrying On After Husband's Death

The above headline, while chosen from a women's page, demonstrates the attractiveness and practicability of Kennerly as a two- or three-column spread or display head. A number of newspapers have adopted Kennerly for two-column heads used in contrast with the straight news heads, as shown at the top of the next page.

# Board to Stand by Girls' School Site

Governor Intimates He Will Favor Oregon Decision

Many papers use some form of italic head to gain a feminine atmosphere. But italic type is designed for emphasis. A little of it used in contrast with other faces is very effective. When whole pages are filled with italic heads, however, there is no contrast. Too many italic heads defeat their own purpose. And they are harder to read, as can be seen below:

*Miss F. D. Fletcher To Be Presented At October Dance*

*Mrs. Fletcher and Daughter to Return Next Month*

*Gay Dinner Parties Feature Events at Newport Colony*

*Mrs. Guy F. Cary, Mrs. Henry Walters, Henry Clews Among Those Entertaining*

When faces such as Garamond or Kennerly in the regular form can be obtained they are much to be preferred to a headline

schedule composed entirely of italics. One or two italic heads on a page will lend color and brightness, but one of the other regular feminine faces should be chosen for the major headlines.

Garamond is particularly fitting. It has more grace and swing to it than Caslon, and a little more warmth and color than either Caslon or Kennerly. It is an elegant and beautiful face, and will give style and character to any woman's page. Garamond, Kennerly, Kentonian and Caslon are all available on the composing machines and are practical for newspaper use.

### FEATURE HEADLINES

Almost every newspaper carries on its front page, and frequently inside as well, occasional human interest or other feature stories to serve as bright spots of color and interest among the straight news matter.

For feature headlines there seems to be more freedom in the choice of type than for straight news heads. In their search for type faces to express a little more warmth and human interest, a bit more informality than is permissible in news heads, papers all over the country have been experimenting with a variety of interesting faces.

First choice among most papers is probably some variety of italic. As far as possible, the italic chosen should match the type face used for the major news heads. The *New York Herald Tribune,* for instance, obtains type harmony in its pages by using a Bodoni Italic to match its Bodoni Bold heads. The *Milwaukee Journal* uses a Cheltenham Oldstyle Italic to match its Cheltenham Medium news heads. Caslon and Century Italics make good looking feature heads where they can appropriately be used with regular news heads. Observe the harmony of news and feature heading in the specimen below.

***Boy Lives Six Days After Wave Breaks His Neck While He Plays***

*Bodoni Bold Italic with Bodoni Bold*

**Republicans Block Parks, Smith Insists**

**Hewitt and Hutchinson Especially Criticized for**

An italic of the right kind makes a pleasing contrast to the news heads, but the practice of some papers of setting in italics all smaller heads on a page defeats the very purpose of this type face and produces many small headlines that are hard to read.

Some papers fall into the error of using all-caps for italic headlines, as in the example below.

***BREAK IN ARMY-NAVY ATHLETIC RELATIONS TO BE HEALED, REPORT***

Italic capitals are exceedingly hard to read, and a series of three lines of them is about as bad a combination as can be imposed on the poor reader. An all-capital headline in straight type is hard enough, but the eyes slip right off a line of italic caps. Upper and lower case should always be used for italic headlines.

PABST OLDSTYLE

Among the many interesting faces being used for feature headlines is Pabst Oldstyle. This face, it will be remembered, is a rather rough, rugged type with distinctive letter formations that give it an antique appearance. It forms an interesting contrast to regular news faces and is black enough so that it shows up well against gray newsprint paper.

Some papers also use Pabst Oldstyle for overlines over illustrations and for special department headings. An example of Pabst headlines is shown below.

International Air Police War on Modern Criminals

New Methods of Law Violators Brings Air Activities.

### BENEDICTINE

Another face of character that serves excellently for feature headings is Benedictine, brought out by the linotype company. The classic gracefulness of this face and the originality of its letter formations makes for distinctive headlines. The Benedic-

**Chicago Printers to Erect Buildings Costing 5 Millions**

tine Bold is quite strong and black. Some newspapers prefer the lighter Benedictine Book. Both have their companion italic. In either form, Benedictine feature heads make an interesting contrast to the regular news heads. An example of Benedictine headlines is shown above.

### THE HANDTOOLED FACES

A few newspapers have been experimenting with handtooled faces on art, music, book review, and editorial pages. Goudy Handtooled, produced by the American Type Founders, Narciss on the linotype, Cloister Handtooled on the intertype, and Cameo on the Ludlow typograph are all beautiful faces and can be used to create an atmosphere of artistry or of dignity and distinction. They are all too light in tone, however, to ever serve as news heads, but they fit perfectly on special pages. They occasionally are to be found on special feature pages in the magazine sections of Sunday newspapers.

### HARMONY IN TYPE FACES

Whatever headlines are chosen, the newspaper editor should strive for harmony in his pages. Too often newspapers appear with a motley assortment of seven or eight different kinds of type faces on a single page. Such a practice can only produce pages that look like a typographic hodge-podge.

The *New York Herald Tribune* has set an example in type harmony. It uses a Bodoni Bold in a full range of sizes for its

news headlines and a Bodoni Italic to match for its feature heads. By using this one face it preserves a uniform tone on all of its pages, and as a result they are unusually attractive.

If two or three different faces are to be combined on a page, they should be similar enough in structure to go well together. A paper that uses Century Oldstyle for its main heads could well use Caslon for contrast heads, because they both have an oldstyle structure. But a paper using Cheltenham Bold for its main news heads could hardly use Caslon, because one is modern and the other oldstyle. Like colors which do not harmonize, they clash when they are put together.

## Body Type Faces

Few newspaper readers can tell one type face from another, yet, without knowing the reason why, they find one paper easier to read and more interesting looking than another, largely because of the difference in type faces.

For many years American newspapers used for their body type various Roman faces that were very light in weight and had many fine lines or serifs. At their very best they were hard to read on newsprint. The fine lines did not show up well, and the sharp corners where these lines joined the main strokes kept continually filling up with ink. Frequently the serifs broke off and the fine cross strokes broke down under the heavy pressure of stereotyping.

Among the better faces used in recent years are Century Expanded and Scotch Roman. Century, it will be recalled, is a plain, legible type much used in the printing of school books. It is regular in form and quite uniform in color. It is a type face without hair-line cross-lines, which commends it at once for newspaper body type. Furthermore, the spaces within the letters seem to have been opened up to permit more "daylight" through the lines. Century Expanded for years has been the best and most easily read news face available.

Scotch Roman is also quite legible. Its principal characteristic is the breadth and openness of its letters. It is somewhat sharper and snappier than Century and gives a greater feeling of liveliness. It does not show up as well on rough newsprint, however, as on smoother finish papers, and some of its sharply cut lines

have made it less popular than Century for newspaper use. It is giving way now to the newer body type faces being brought out by the composing-machine companies.

### THE NEW IONIC AND IDEAL NEWS FACES

The new Ionic Number 5, brought out by the linotype company, is a little heavier and bolder than Century or Scotch Roman. The characteristic of this face is that it is more uniformly bold. There are no fine variations in shading to tax the eyes. Its letters are full and round; there are no sharp corners or pin-holes to fill up with ink. In many ways its letter construction resembles Bookman, which long has been considered one of the most legible of type faces. It is modern instead of oldstyle, but it has the same short ascenders and descenders as in Bookman, with large round body letters letting in plenty of light through the white spaces. It is an exceedingly legible face and has won great favor with both newspaper publishers and readers. It has been adopted by many of the leading newspapers of the country, including the *New York World*, the *New York Evening Post*, the *Milwaukee Journal*, the *Washington Post*, and the *Los Angeles Times*.

The Ideal News face was brought out by the intertype company and, while modeled after Century, combines many of the best features of both Century and Ionic. It has the same short ascenders, descenders, and large round body letters as Ionic. The strokes, which resemble those of Century, have been thickened and made bolder, yet the artistic lines of the letter have not been marred by making the strokes all of the same thickness. The producers of this face declare that monotony is just as tiring on the eyes as too many fine lines, and that the eye craves contrast. The Ideal News face has all the legibility of Ionic and, some typographers say, more sparkle and interest. It is used by the *New York Times*, *New York Sun*, *Seattle Times* and many others.

The kind of body type chosen depends, of course, on the faces made available on the composing machines with which the paper is equipped, but both linotype and intertype users can now get good legible body type faces. Ionic number 5, Ideal News face, and Century Expanded are probably the three best news faces available today.

### BODY TYPE SIZES

The body of most metropolitan papers is set in 7-point type, although there are a few famous old papers that still stick to nonpareil or 6-point. Tabular matter, such as market reports and sport scores, is often set in 6-point or 5½-point type. On the editorial page, in an attempt to open it up and make it more readable, many papers are using 8-point and even 8-point cast on a 9-point slug, to get the effect of extra white space between each line. A few newspapers use 10-point type on their editorial pages. Often when a news editor desires to throw the lead paragraph of an important story into greater prominence, he has it set in 8-point, and if it is an unusually big story he may have the lead set in 10-point, double-column measure.

In country weeklies and small city papers, the body type size runs uniformly larger than in metropolitan papers. While the big city paper must crowd all the news matter it can into each page, and for that reason uses a smaller type size, the country paper has not as much news to fill its pages, nor can it afford to set up as much matter. Hence it uses a larger type size in order to fill out its pages with a smaller amount of material. Most country weeklies and many small city papers use 8-point for their body type, a few 8-point on a 9-point slug or 7-point on an 8-point slug.

### THE NEW SPLIT SIZES

Recently the linotype company has brought out its new Ionic type face in split-point sizes, such as 6¾, 6½ and 6¼, in addition to the regular, 6-, 7-, and 8-point sizes. The claim is made that the new face is so legible that it can be more easily read in the smaller split-point sizes than ordinary body types in 7-point. Furthermore, Ionic letters fit together more closely than those of ordinary body types. A line of 6¾-point Ionic has the same word count as an ordinary 6-point type. The use of these split-point, closely fitting sizes thus makes for a decided saving in newspaper space, a factor that is important for many papers.

Space saving, however, must not be carried to the point where it sacrifices legibility. Ionic 6¾-point mounted on a 7-point slug is more legible than ordinary 7-point. Because of the wide shoulder on this type and the conformation of the letters, even

6½-point is quite easily read, but the use of smaller sizes is carrying space economy too far.

### TYPE SIZE AND LEGIBILITY

English newspaper editors who have visited America have always commented upon the small body-type sizes used in our newspapers. English papers set not even their smallest matter in anything less than 7-point, and all important stories are liberally leaded.

Opticians claim that the fine print used in our newspapers has been ruining the eyesight of the American people. It is a hopeful sign that both the linotype and intertype companies, on whom most American newspapers are dependent for their body-type composition, have now made available on their machines new type faces which are much improved in their legibility. Both the Ionic Number 5 on the linotype and the Ideal News face on the intertype have had the endorsement of optometrists as being a forward step in conserving the eyesight of American newspaper readers.

### LINE LENGTH AND LEGIBILITY

In reading small type, the eye must focus very closely, and as a result the width of the line that it can grasp at a glance is rather narrow. If a block of type is too wide for the size of type it is set in, the reader will find it hard to follow the copy and keep his place. In reading larger type, the eye-focus is wider, and as a result a wider measure must be used or the eye will be compelled to make repeated jumps back and forth across a narrow space.

This is 8-point set 6 picas, a measure much too narrow for easy reading. Note how the eye has to jump back and forth.

This is 8-point set in the proper width. It is much easier to read because the eye can take in a whole line at a glance.

This is 8-point set 20 picas wide. Observe how hard it is for the eye to follow and keep its place. That is because the measure is wider than the normal breadth of focus of the eye. Each line is about a glance and a half, and the odd measure at the end throws the eye off.

Typographers have worked out the following table of minimum and maximum widths of line which permit easy reading in the sizes most frequently used for advertising body type:

| | |
|---|---|
| 8-point ..... | 9 to 13 picas |
| 10-point ..... | 13 to 16 picas |
| 12-point ..... | 14 to 21 picas |
| 14-point ..... | 18 to 24 picas |
| 18-point ..... | 24 to 30 picas |

Perhaps the student has wondered why the standard width of newspaper columns is either 12½ or 13 pica ems. It is because these are the maximum line widths that the eye can grasp at a glance in 7- or 8-point type. There would be no need for the journalism student or newspaper worker to worry about line width if all matter were set single-column measure, for newspapers have already standardized that to the right width.

Frequently, however, it is necessary to set the lead of an important story in two-column measure. Since the maximum for 7- or 8-point is 13 ems, it is obvious that a larger type size must be chosen for the 25½- to 26-em width of the two-column measure. Ten-point, the size used in most books in which the line width is usually 21 to 23 ems, is used by many newspapers for double-column measure. While type experts say that the maximum width for a 10-point line should be 16 ems, the average reader does not find great difficulty in reading 10-point type set 23 to 25 ems, because his eye can take in a line in two "takes," as it were. While his eye slides along the line, unconscious of these "takes," the reader would see that he absorbs the sense of the first half of the line with one glance and the rest with a second, if he were to stop and analyze the motion of his eyes. He reads that line quite easily because it breaks evenly into two "takes"; but lengthen that line a little and a third shift of the eyes will be necessary. It will be hard for the eyes to keep their place in the line, and that odd short measure, which it is necessary to grasp at the end of the line, will be confusing. Twelve-point is better than 10-point for two-column measure, for it fits the focus of the eye more closely.

Some newspapers, in trying to brighten up their editorial pages and make them look different from the rest of the paper, are setting their editorials in two-column measure, using 7- or 8-

point type. They are defeating their own purpose, for even 8-point is too small to set in that wide a measure. The normal grasp of the eye in 8-point is 9 to 12 picas. It would be better, then, to reduce the width of the editorial column to 18 ems, which would give the eye two even "takes" in a line of 8-point, thus relieving eyestrain. If a wider measure is desired, 10- or 12-point type should be used.

### SPACING BODY TYPE

Another factor in legibility is the amount of space between lines. Type lines set solid are harder to read than those that are leaded. Metropolitan papers, as a rule, have been greater offenders in this respect than country papers. The more progressive city papers, however, are leading their front pages and the lead paragraphs of most stories in order to start the reader's eye easily into the story. To avoid leading whole pages by hand, as in the case of editorial and special feature pages, adjustments can be made on the intertype and linotype to cast an 8-point face, for example, on a 9-point slug.

### CONCLUSION

The whole matter of newspaper typography is still in a stage of experimentation. Newspapers all over the country are giving attention to this matter of making their pages more attractive. They are adopting body types that are easier to read. They are abandoning the ugly Gothics and condensed faces of the past generation, and are making their papers more interesting with a new type dress for their headlines. They are trying out this type face and that, and their experimentation is a hopeful sign, for out of it will come a better newspaper. There are many faces that lend themselves to headline use, but in the Bodonis, Cloisters, Century Oldstyles, Caslons, Goudys, Garamonds, Kennerlys, and the standard widths of Cheltenham suggested in this chapter there seem to be the best possibilities and enough variety to fit the needs and character of any newspaper.

### SUGGESTIONS FOR THE STUDENT

1. Criticize the choice of type faces for news headlines in your local paper. What changes would you suggest?

2. Make a comparative criticism of type faces used in headlines of several metropolitan papers.
3. Select a particular newspaper and work out a new headline schedule, specifying the changes in type faces that you would suggest.
4. Study the catalogues of type founders and composing machine manufacturers to get acquainted with the different type faces that are available for headline display. Find out from your local newspaper the faces it has available on machines and which ones it has in foundry type from which hand-set heads might be called for.

## CHAPTER VIII

### HOW TO USE HEADLINE FORMS

TYPE faces play an exceedingly important part in the make-up of any newspaper, but these faces are useful only as they are translated into the various typographic devices used in the presentation and display of news.

To many editors the knowledge of type and how to work with it is almost a closed book. If an emergency arises that calls for any departure from the regular headline schedule, they are hopelessly lost. But the editor who knows how to work with type has at his command innumerable devices to make his pages more interesting and attractive. He is able to play upon these changes in type face, style, size, and arrangement to produce almost any tone or effect he may desire. His newspaper is the one whose pages breathe life, interest, and variety.

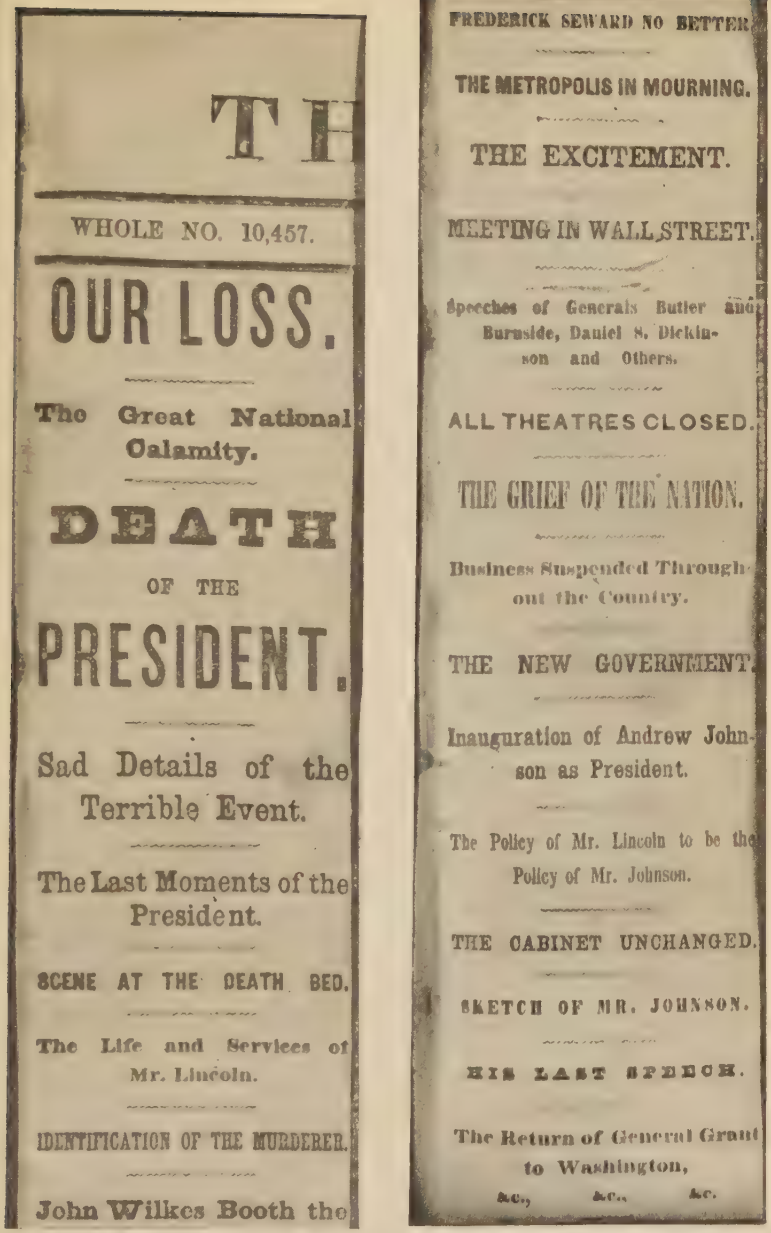
The beginner who acquires this knowledge can make himself many times more valuable to his newspaper than the man who knows nothing of typography.

This chapter and the one following will take up in detail some of the typographic devices at the command of the editor. This chapter will concern itself with the interesting possibilities in different forms of headlines.

#### MAKING THE HEADLINE SCHEDULE

Once the type face or combination of type faces desired for newspaper headlines has been decided upon, a definite scheme of headlines should be worked out. Such a schedule has two advantages: it insures a uniformity in headline form and tone, and it saves time both on the copy desk and in the composing room. The copyreader is able to specify his headline by number, and the printer in the composing room at once knows the arrangement of decks and the style and size of type faces desired.

It is but a few years ago that newspapers, in an attempt to



TH

WHOLE NO. 10,457.

OUR LOSS.

The Great National Calamity.

DEATH

OF THE

PRESIDENT.

Sad Details of the Terrible Event.

The Last Moments of the President.

SCENE AT THE DEATH BED.

The Life and Services of Mr. Lincoln.

IDENTIFICATION OF THE MURDERER.

John Wilkes Booth the

FREDERICK SEWARD NO BETTER

THE METROPOLIS IN MOURNING.

THE EXCITEMENT.

MEETING IN WALL STREET.

Speeches of Generals Butler and Burnside, Daniel S. Dickinson and Others.

ALL THEATRES CLOSED.

THE GRIEF OF THE NATION.

Business Suspended Throughout the Country.

THE NEW GOVERNMENT.

Inauguration of Andrew Johnson as President.

The Policy of Mr. Lincoln to be the Policy of Mr. Johnson.

THE CABINET UNCHANGED.

SKETCH OF MR. JOHNSON.

HIS LAST SPEECH.

The Return of General Grant to Washington,

&c., &c., &c.

A TYPICAL HEADLINE OF THE CIVIL WAR PERIOD

Note the succession of alternate cross-lines and pyramids.

obtain variety, used a different type face in each deck of every headline. The typographic hodge-podge that resulted was representative of that era known as the "dark ages of American printing," which lasted longer in newspaper pages than in other fields of printing. Today the most progressive newspapers, from a typographic standpoint, use but a single type family, or at most two or three closely related families in order to create harmony and uniformity.

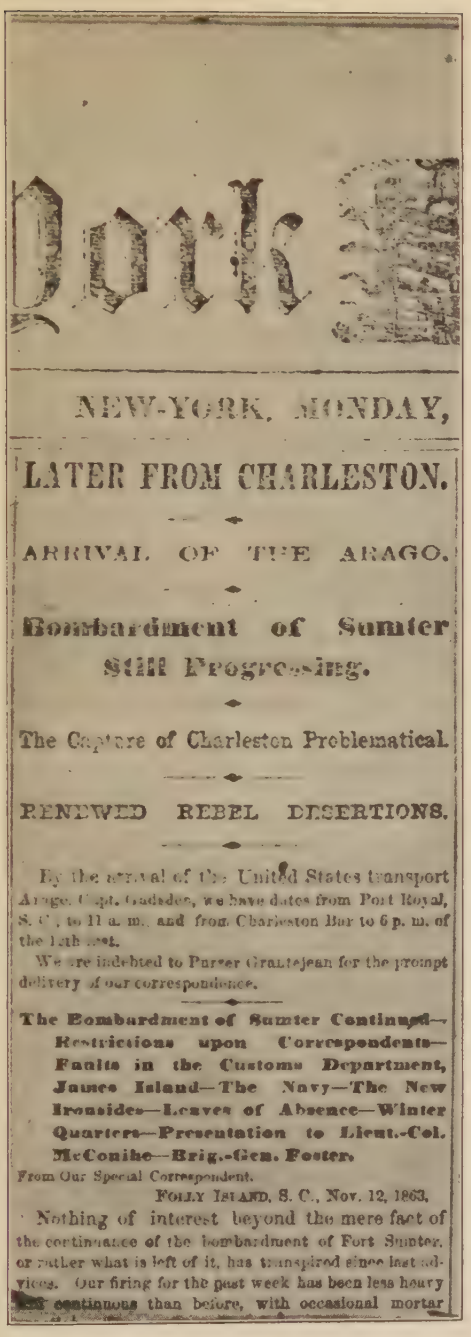
### THE DEVELOPMENT OF AMERICAN HEADLINES

The forms of the present-day headline have gone through an interesting development. In the early days of American journalism, the headlines, if they could be called such, were mere labels—small one-column cross-lines set usually only in the capitals of the body type. Even up to the Civil War, though headlines had grown to series of cross-lines one above the other, they were still mere labels in 12- or 14-point capitals.

But when the Civil War broke out, people became impatient of such headlines. They wanted to know, the minute they picked up the paper, which side had won the battle, without having to wade through columns under such meaningless heads as "News from the Front" or "Late Southern News." Newspaper editors had to respond with action headlines that really said something and that bulletined the news.

Action verbs and specific statements transformed the American headlines almost over night. Then, to get greater display as the war went on, papers increased the number of decks until they filled whole half columns. One edition of the *New York Tribune* displayed a headline of 29 single-column cross-lines.

In order to say something in headlines, it sometimes became necessary to use more words than could be held in a single cross-line, and so the printer carried over the extra word or two and centered it under the first line. As a result, the pyramid headline was born. It gave printers and editors alike an idea; they began experimenting with longer pyramids of several lines to sum up everything that they did not have room for in the top deck. In this experimentation the third form of headline type arrangement—the hanging indention—was born. As early as October 22, 1863, a headline appeared in the *New York Tribune,*



NEW-YORK, MONDAY,

# LATER FROM CHARLESTON.

## ARRIVAL OF THE ARAGO.

## Bombardment of Sumter Still Progressing.

## The Capture of Charleston Problematical.

## RENEWED REBEL DESERTIONS.

By the arrival of the United States transport Arago, Capt. Gadsden, we have dates from Port Royal, S. C., to 11 a. m., and from Charleston Bar to 6 p. m. of the 14th inst.

We are indebted to Purser Grantejean for the prompt delivery of our correspondence.

**The Bombardment of Sumter Continued—Restrictions upon Correspondents—Faults in the Customs Department, James Island—The Navy—The New Ironsides—Leaves of Absence—Winter Quarters—Presentation to Lieut.-Col. McConihe—Brig.-Gen. Foster.**

From Our Special Correspondent.

FOLLY ISLAND, S. C., Nov. 12, 1863.

Nothing of interest beyond the mere fact of the continuance of the bombardment of Fort Sumter, or rather what is left of it, has transpired since last advices. Our firing for the past week has been less heavy and continuous than before, with occasional mortar

AN EARLY USE OF THREE HEADLINE FORMS

One of the first cases of the cross-line, pyramid, and hanging indention being used together over the same story.

in which all three kinds of type arrangement were used. It is shown on page 211.

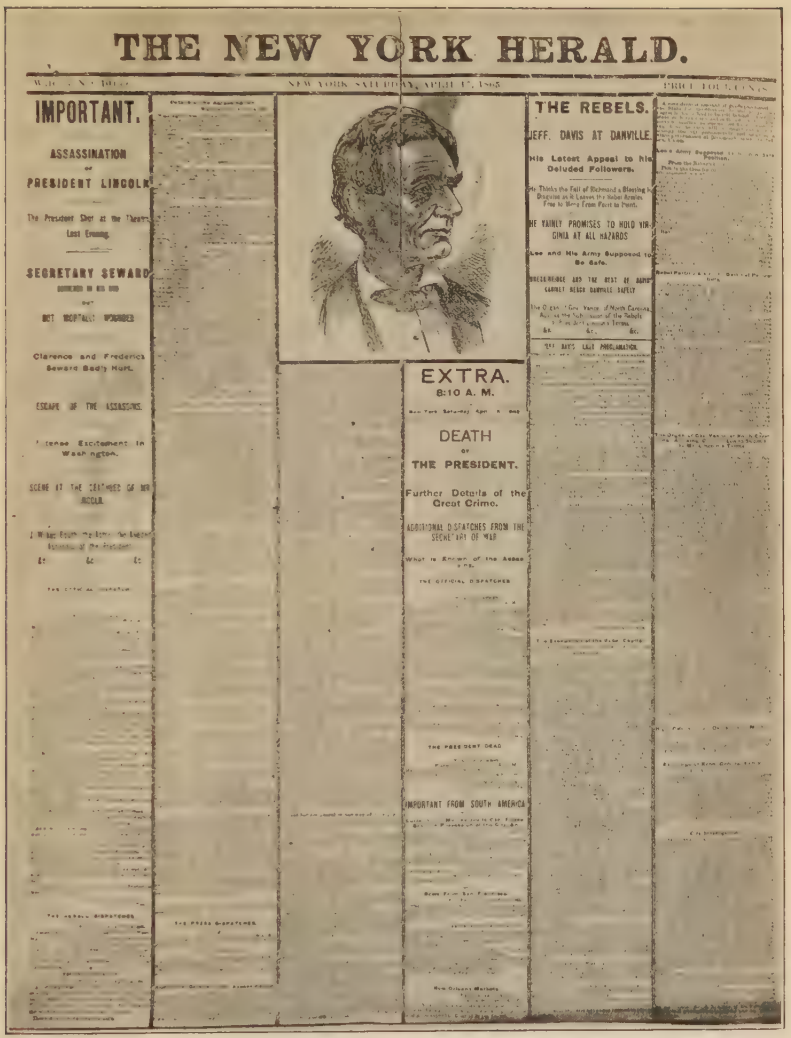
After the Civil War the development of the headline was slow. The middle-western papers in the seventies were perhaps most progressive. The *Chicago Tribune* and *St. Paul Pioneer Press* were using better heads than the New York papers and were making successful attempts at uniformity and symmetry.

### THE ADVENT OF THE DROP-LINE HEAD

It was not until late in the eighties that the next important development took place—the invention of a new form of top deck. While newspapers had been using pyramids and hanging indentions for their subordinate decks, the top deck all this time was limited by newspaper rule and tradition to a single cross-line. As a result, the top deck was still often a label, and it was left to the lower decks to explain the story and introduce action. But when headline writers began to try to say something in that top deck, the single cross-line was not enough. Out of this need there was born, on the *New York Herald*, the drop-line or step-line, in which the top deck was set in two or three lines stepped below each other.

This form of headline became popular over the country in a few months. The first drop-line heads were very imperfect and poorly balanced, but they kept improving. Many papers considered the drop-line as an innovation which their conservatism would not permit them to follow. The *Chicago Tribune*, for instance, did not use the drop-line until the last weeks of 1898. Today, however, the drop-line consisting of either two or three lines is used for the top deck of most American newspaper headlines.

During this time newspapers had held to a vertical display and make-up. Headlines seldom, if ever, broke the single-column rule. This custom had its origin in the mechanical limitations of the type-revolving press used by American newspapers from 1846 to 1871. The columns of type were placed on large vertical cylinders and held in position by wedge-shaped rules. It would have been impossible to hold any type matter set two columns in width on the flying cylinder, because the curve would have been too great to give the wedge-shaped rules on either side the



THE NEW YORK HERALD.

NEW YORK SATURDAY, APRIL 15, 1865

IMPORTANT.

ASSASSINATION
OF
PRESIDENT LINCOLN

The President Shot at the Theatre Last Evening.

SECRETARY SEWARD

AND
NOT MORTALLY WOUNDED

Clarence and Frederick Seward Badly Hurt.

ESCAPE OF THE ASSASSINS.

Intense Excitement in Washington.

THE REBELS.

JEFF. DAVIS AT DANVILLE.

His Latest Appeal to his Deluded Followers.

He Thinks the Fall of Richmond a Blessing in Disguise as it Leaves the Rebel Armies Free to Move From Point to Point.

HE VAINLY PROMISES TO HOLD VIRGINIA AT ALL HAZARDS

Lee and His Army Supposed to Be Safe.

BRECKINRIDGE AND THE REST OF ARMY CAREFULLY REACH DANVILLE SAFELY

EXTRA.
8:10 A. M.

DEATH
OF
THE PRESIDENT.

Further Details of the Great Crime.

ADDITIONAL DISPATCHES FROM THE SECRETARY OF WAR

THE OFFICIAL DISPATCHES

THE PRESIDENT DEAD

IMPORTANT FROM SOUTH AMERICA

VERTICAL MAKE-UP USED BY AMERICAN NEWSPAPERS BEFORE THE NINETIES

necessary purchase. Mechanical necessity therefore decreed that for thirty years headlines be kept to single-columns widths.

### THE DEVELOPMENT OF HORIZONTAL DISPLAY

The rotary press and the curved stereotype plate removed these mechanical limitations, but the single-column tradition had become so firmly rooted on American newspapers that for years there was no change. A few wider heads began to appear in the Sunday *World* as early as 1892, and here and there other papers ventured to follow with an occasional double-column head, but it was not until William Randolph Hearst's *New York Journal* and Joseph Pulitzer's *New York World* came to blows in a battle royal for circulation supremacy during the middle nineties that headlines definitely spread beyond the single-column width. The fight between these two papers brought a new idea, that of using the headline to advertise the news to possible buyers, as well as to bulletin it. As a result, heads soon grew in size and blackness. Early in 1897, when war between Spain and the United States became imminent, the *Journal* began the regular use of streamer headlines across the top of its front page.[1] Both papers seized upon the possibility of war as a heaven-sent opportunity to try to outdo each other in striking and sensational display. Banner heads, spread heads covering several columns, and huge line drawings became the everyday custom. When the battleship *Maine* was blown up, the *World* came out with its entire front page given up to a single line-drawing of the *Maine* under a bold banner headline and caption. The *Journal,* not to be outdone, spread illustrations over two inside pages, and when war was declared it achieved its climax by devoting its entire front page to three giant 21-inch letters, *W A R.*

Headlines had now come to play an important part in selling the newspaper by advertising its contents on the street and news stands. How effective this idea proved can be judged from the fact that in the second week after the explosion of the *Maine* the *World's* circulation had jumped to nearly 1,000,000 copies daily.[2]

[1] Willard G. Bleyer, *History of American Journalism,* p. 365.
[2] *Ibid.,* p. 341.

OVER ELEVEN HUNDRED THOUSAND *EVERY* DAY.

THE CIRCULATION OF THE JOURNAL FRIDAY WAS *1,225,980* ALL FREE COPIES EXCHANGES, SAMPLES AND WASTE DEDUCTED.

An American Paper for The American People

# NEW YORK JOURNAL

AND ADVERTISER

An American Paper for The American People

NEW YORK SUNDAY APRIL 24, 1898. 16 PAGES. PRICE FIVE CENTS

# COLUMBIA AND MINNEAPOLIS PUT TO SEA.

JOURNAL'S DISPATCH BOAT RUNS THE BLOCKADE!

EITHER PARIS, SHENANDOAH NOR TOPEKA CAUGHT.

# ALL OUR SHIPS SAFE; SPANISH LINER CAPTURED.

The Paris Is Safely Crossing the Atlantic: Havana Is in a Panic Over the Prospect of Bombardment. Part of the Flying Squadron Puts to Sea to Convoy the Troop Ships.

*OLD POINT COMFORT, Va., April 23. The gun calling all on board the Minneapolis has just been fired, 9:03 o'clock. The Columbia and Minneapolis will put to sea at once.*

*The convoy Panther, with 800 marines aboard, bound for Key West, arrived here to-night at 7 o'clock.*

*Commodore Schley, of the Flying Squadron, received a cipher at 9 o'clock directing him to provide a guard for the convoy. The Minneapolis and Columbia were immediately detailed.*

Journal Dispatch Boat Flying the German Flag, Stopped by a Solid Shot from the Armored Cruiser New York.

## JOURNAL BOAT RUNS THE BLOCKADE WITH NEWS FROM HAVANA.

[From the Evening World]

CHASED GERMAN STEAMSHIP

## REPORT THAT THE PARIS HAD BEEN CAUGHT BY A SPANIARD HAD NO FOUNDATION IN FACT.

By James Creelman.

## REPORTED CAPTURE OF SPANISH MAIL STEAMER.

THE HORIZONTAL DISPLAY OF THE SPANISH-AMERICAN WAR PERIOD

As the war progressed, both papers developed many new ideas in display. Series of banners and huge spread heads in three- and four-inch wood type became a daily feature. On big days the headlines would crowd almost all of the reading matter off the front page.

Other newspapers did not go to such extremes. The *New York Tribune*, for instance, did not break its single-column rule until the day that war was declared, and then it merely ran the head and the story in two-column measure. That was as far as its conservatism would let it go. Even the victory at Manila and the declaration of peace some months later was heralded in the same two-column head and make-up. A great many papers, however, began breaking their single-column rules and using larger display heads of two or more columns. By the end of the war the spread head had become well established.

After the war, headlines became more conservative. Pulitzer, who really had never liked this large display, ordered all the big headline type in his shop melted up; but the other New York papers refused to give up their two- and three-column spreads, and the *World* had to follow to stay in the circulation race. Display was less bold, however, and banner heads became less and less frequent. Many papers slipped back into headline schedules that to our eyes today would look dead and uninteresting. From 1905 to 1914 banner heads and large display were used principally by afternoon papers for street sale purposes.

The years just preceding the World War brought larger display once more. Headlines grew in size; three- and four-column spreads became common, and when war broke out the banner headline came into its own. Nearly all American papers used banner heads daily, with two- and three-column spreads under the banner. Some papers used, almost daily, two, three, and four banners, one above the other.

By the end of the war the banner appeared to have become a fixture on American front pages. The war had shown the banner to be such an important factor in street sales that newspaper editors declared they could not afford to abandon it, regardless of the fact that they often did not have news worth a "line," as it is called in most newspaper offices. But in recent years the overplay of news made necessary by the daily use of banners

has led many papers to abandon the daily "line" in favor of spread heads for major display.

### KINDS OF HEADLINE FORMS

Out of this development have come four principal types of headline forms.

1. *The Cross-line*—a single line stretching across the space allotted to the headline. In its larger forms it may be expanded to a five- or six-column streamer or an eight-column banner.

In its single-column form it may be set flush to the column rule on either side, or it may be centered between the two rules:

*Cross-line set flush*

ROB, SET FIRE TO SCHOOL

*Cross-line centered with bank*

TO SAIL OVER NEW YORK.

The City Will Be Visited Before Going to Lakehurst.

Except on a few conservative papers, the cross-line is never used as the top deck, but always as one of the subsidiary decks of the longer headlines between two pyramids or hanging indentions.

2. *The Drop-line or Step-line*—In its simplest two-part form, the first line is set flush to the left-hand column rule and extends to within two or three units of the other rule, leaving a bit of white space at the end, while the second line is indented an equal number of units from the left-hand side and extends flush to the right-hand rule:

Flames Trap
Sleeping Girl

Drop-lines may be set in two, three, or four lines. The lines, of course, must be shorter as the number of lines increases, in order to make the head conform to the step-line arrangement.

The drop-line head is the form usually employed in the two-three- or four-column spread heads except in Sunday magazine sections.

3. *The Pyramid*—This should really be called the inverted pyramid, but newspaper custom has shortened the name. Its first line is set flush to the column rules on either side, but each succeeding line is made shorter than the one above it and centered in the middle of the column, giving the whole headline an inverted pyramid form. It may consist of two, three, or four lines.

Declares Journalism Students
Should Have Good Back-
ground of History

This is the headline form most commonly found as the top deck in English and European papers, but in America it is seldom used there except in Sunday magazine sections. Ordinarily it is employed as one of the subordinate decks. A few Hearst newspapers, however, use the pyramid as a top deck in the following form:

'CAL' PREPARES
FOR HOLIDAY
IN SOUTH

4. *The Hanging Indention*—As in the pyramid, the first line of this headline form is set flush with the rule on either side, but succeeding lines are indented an em or two at the left and come out flush to the right. The last line, indented like the others, usually does not fill the full space. For example:

Bandits Arrested in a Downtown Hotel as Auto, Parked in Garage Gives Clue

The hanging indention is always used as a subordinate deck. There is still a fifth form, which has been dubbed on some newspapers the "flush-line" head, though it is really only a variation of the drop-line. It consists of a series of two, three, or four lines set flush to the rules on either side:

PACT LIMITS
CRAFT NATION
MUST BUILD

It had its origin in the difficulty of getting headlines into drop-line form in the 30- to 42-point type that some papers use for their top heads. The number of units permitted in a drop-line head in this size was so small that it was exceedingly hard to say anything in the headline, so the lines were merely stretched out on either side to give a better count. The flush-line is not as good a headline form as the drop-line. It looks crowded, it has less attention value because it permits no white space to set off its headline words, and it is harder to read.

Recently an innovation in headline form has been made by the *New York Morning Telegraph* which has thrown overboard all the old established head forms and created one of its own. Instead of having a number of decks, as do most New York papers, the *Telegraph* uses only two. The top deck in a heavy black Ultra Bodoni is set flush to the left and runs ragged at the right. If the top line is short and the second one long, they

stay that way—no attempt is made to squeeze the lines into any set form. Therefore, great flexibility is possible. The second deck consists of three lines of summary, set in Bodoni Bold Italic, indented two ems at the left, and brought flush to the right-hand column rule. Examples of these heads are shown below:

A

**GrandPrinceWins In Easy Gallop**

***Swenke Horse Lopes His Way to Easy Victory in Rockne Purse.***

B

**Rickard Reveals Miami Secret To Waiting World**

***Sharkey-Stribling Bout on February 27 Now Certainty as Tex Makes Announcement.***

It is a type of headline arrangement that long has been used by advertisers. There is no reason why it should not be just as effective for news headlines. The choice of type face in this case is poor, but the headline arrangement itself has much to commend it. It serves quite as effectively as any of the standard forms to flag the attention of the reader and bulletin the news, and it is much more flexible and easier to write than the usual drop-line top deck.

It must be admitted that the two-line top deck form in Figure A, in which the first line is longer than the second, is not unattractive. But in the three-line head shown in Figure B, the ragged effect on the right-hand side looks too much like a poorly

balanced drop-line head. This form violates the reader's sense of symmetry and balance.

This head might be improved if the top line were made the longest, the second indented a trifle, and the third permitted to run short. This would have the added advantage of creating the effect of movement down into the story.

This headline form may be too much of an innovation for immediate adoption by many newspapers, but it has several advantages that are worthy of consideration. The *Linotype News*, which long has pointed the way to better newspaper typography, advocates this type of headline as being easier to write and more attractive than the usual formal headline arrangements.

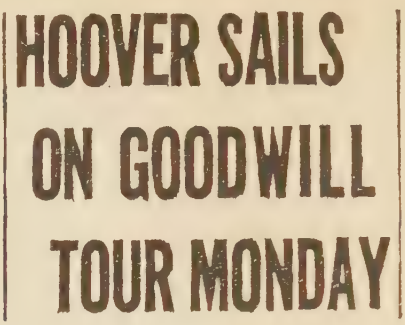
### COUNTING IN HEADS

In writing any of the four standard headline forms, great care must be exercised to keep the headline words chosen within the proper line length or it is obvious that these forms will lose all symmetry. Words must fit exactly. No matter how nicely a set of headline words may express the thought desired, it cannot be used if it is the least bit too long or too short for the allotted space.

In order to make headlines "come out right," copy editors and printers have devised a system of counting in heads. Each letter and space that goes to make up a line is figured as a unit or a fraction of a unit, depending upon its width. Now the different type faces, of course, vary in the width of their letters, but the formulæ used by most newspaper offices will average quite accurately for the type faces customarily used for headlines.

For heads that are set in all capitals, each letter is counted as one unit, with the exception of the capital *M* and *W*, which are wider than the others and are counted as 1½, and the capital *I* and the figure *1*, which are narrower and are counted as only one-half unit each. Spaces between words are counted as one-half unit, as also are all punctuation marks, with the exception of the dash and the double quotes, which count as a full unit.

The process of counting in an all-cap top deck is shown on the next page.




1 1 1 1 1 1 ½ 1 1 ½ 1 1
HOOVER SAILS

1 1 ½ 1 1 1 1 1½ ½ 1 1
ON GOODWILL

1 1 1 1 ½ 1½ 1 1 1 1 1
TOUR MONDAY

For upper and lower case heads the formula is slightly different, for it is obvious that there are greater differences to be taken into account between the capitals and the varying widths of small letters. In general, the following formula will give a fairly accurate count for most of the type faces used for headlines:

| | |
|---|---|
| Count all small letters as | 1 unit |
| except the *m* and *w*, which take up | 1½ units |
| and the *i*, *l*, *t*, *f*, *j*, and figure *1* which count | ½ unit |
| Count all capitals as | 1½ units |
| except the *M* and *W*, which count | 2 units |
| and the *I*, which counts only | 1 unit |
| Count spaces as | 1 unit |

The count for punctuation marks is the same as in all-capital headlines.

The process of counting in an upper and lower case head may be illustrated thus:

1½ 1 1 ½ 1½ ½ 1 1 1 1½ 1 ½ 1
Non-Stop Trip —13 units

2 1 1 1 1 ½ 1 1 1½ 1 1 1
Made in Less —13 units

1½ 1 1 1 1 ½ 1 1 1½ 1 1 1 1
Than 19 Hours —13½ units

Accurately counted in, such a series of lines produces a headline of pleasing symmetry, as shown below.

Non-Stop Trip
Made in Less
Than 19 Hours

Equipped with these two formulæ, a copyreader can go into any newspaper office and, after clipping out and counting in the various headlines used, he will be able to write corresponding headlines of his own, assured that if his count is within the latitude allowed, his headlines will "set up" without difficulty and will look right when they appear in the paper.

### LATITUDE PERMITTED IN THE HEADLINE COUNT

In ascertaining the count for any given drop-line head, the number of units that makes the best looking and best balanced headline is considered the normal line. Thus, in the headline above, 13 units per line give excellent balance. That a certain leeway is possible is evident, however, from the fact that the last line held 13½ units without seriously affecting the symmetry of the headline. Still another half unit might have been squeezed in, but it would have made the last line flush with the column rules on both sides and would have thrown the whole head out of balance. In heads set in 24-point type or larger, a leeway of one-half unit above or below the normal count can be permitted without destroying the drop-line form. Thus, in the above headline, a count of from 12½ to 13½ units might

be considered safe. If it is necessary to squeeze in a whole extra unit, the head will look better if all lines are made full; that, of course, will make a flush-line head, but even this is better than a poorly balanced drop-line. In drop-lines set 18-point or smaller, a latitude of a full unit each way safely may be allowed.

In the cross-line it is merely necessary to figure the maximum number of units that can be contained in the line from rule to rule, and to keep within that limit.

The pyramid and hanging indention forms are more flexible. With more words and more spaces between words to juggle with, the printer can be relied upon to take up space or to break words where necessary to make the headline come out right. Breaking words, while not permissible in top decks, generally is allowed in the subordinate pyramid and hanging indention decks. Hence, it is sufficient in these decks merely to count words. But words vary greatly in length, so the seven-letter word has been decided upon as the unit-word. In counting a hanging indention, the copyreader merely checks off every seven letters to get the word count for his headline.

When the pyramid is used for a top deck, almost as great care must be exercised as in the building of a drop-line head. The top line is set flush, so its count will be the maximum. Succeeding lines must decrease in their unit-count in order to secure the inverted pyramid form. The pyramid top deck is a little easier to write than the drop-line, for greater latitude is permitted in the length of succeeding lines, the only requirement being that they decrease in count to preserve the pyramid form.

Whatever headline form is used, care must be taken to keep the number of units as close to the normal count as possible. More trouble is caused between copy desk and composing room by the attempt of headline writers to squeeze in an extra letter or two than by any other cause. Heads frequently come back to newspaper copy desks because they "won't go in." As has been pointed out many times before, type is not made of rubber. If the maximum count is 14, it is just as impossible to get 14½ units in as it would be to force 20 into the space. Too short a line, likewise, may destroy the appearance of the headline. The copy editor who takes care in the building of his headlines will not only save much valuable time but will prevent ill-will in the composing room and will improve the appearance of his paper.

The unit-count is not always infallible, however, because type faces vary in their widths. Figures are fatter in some faces than in others and may throw a perfectly counted line out of balance. Double quotes, while counting a full unit, are thin in some faces, and if placed at the beginning of the first line may cause an awkward unbalanced headline. Quirks like this make it necessary for the copy editor to know the headline type in his own composing room so that he may be sure of the latitude allowed in the different faces.

### MARKING HEADLINE FORMS

To prevent misunderstanding in the composing room, headlines should be written word for word and line for line as they are expected to appear in print. All-cap heads must be written in capitals or the count will not come out right. The form of each deck is also indicated by the conventional markings shown below.

]NEARS AIR GOAL[

\Arrest Three\
\in Theft Ring\

\St. Olaf Chorus Will Give\
\Concert at Luther\
\Memorial\

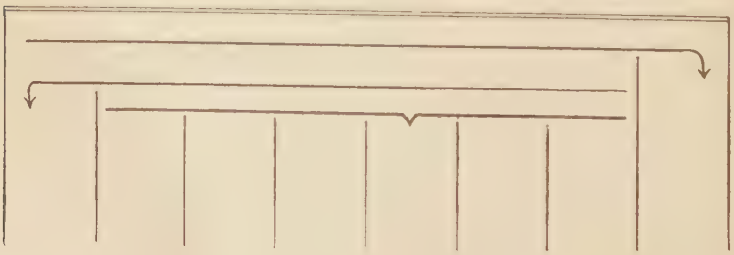
Dole Hawaiian Race
Winner Completes
the First Continuous
West to East Hop

The headline forms described above are used in series of decks in various combinations on different newspapers. The remainder of this chapter will be devoted to an explanation of how these headline forms and their combinations may be used most effectively to create interesting and attractive looking newspaper pages.

### HOW TO USE THE "LINE"

When a single "line" is used, ordinarily it is run across the top of all eight columns. A few papers that use a daily editorial feature in the first column run it at the top of this column and make up the rest of the page as if it were a seven-column page, running the banner across the remaining seven columns. The size of type used may vary from 60-point to 3- and 4-inch wooden letters, but most papers use either 72- or 120-point type. Heavy black Railroad or Franklin Gothic is used by most papers that have an all-cap schedule. Papers that use upper and lower case heads find a Cheltenham Bold much more satisfactory, because Gothic lower case letters are ugly and illegible. Goudy Bold is a good choice if the rest of the heads are set in classic faces. Caslon Bold or Century Bold would go well with Caslon or Century schedules. A few of the graver toned papers find Century Oldstyle Bold or Clearface Bold very satisfactory.

When more than one "line" is used, as is the practice on many papers of sensational display, the top line usually runs across eight columns and reads out into its drop head and story in the last or "turn" column. The second line runs across the remaining seven columns and drops into column 1. The third line jogs back over the remaining six columns and may drop into either column 7 or preferably right down the center into columns 4 or 5. This is the easiest way of making it clear to which stories the various lines belong, as readily can be seen in the diagram below.



Straight cut-off rules separate each line from the type matter in the columns below it, except in the column into which its story drops, where either a 3-em or a 6-em dash is used between the line and its drop head.

There appear to be no set rules, however, for the arrangement of lines. Sometimes two and even three banners are used across eight columns; again the top line may go across eight columns, and the other two over seven columns; frequently a fourth line is run at the very top of the page above the nameplate of the newspaper. It then becomes a nice problem in guesswork for the reader to determine to which stories the various lines refer.

To obtain contrast between the different lines, it is necessary to set them in different sizes and kinds of type. When two all-cap lines are used, the top line is ordinarily set in heavy Gothics and the second line in a bold italic of a smaller size, as shown on the next page.

In upper and lower case papers, the second line may be in italics, or frequently in a lighter face of the same kind of type used in the top line. A few newspapers using Cheltenham Bold for their banners are using Goudy Bold or Goudy Bold Italic for a second line, and either makes a good contrast.

A few years ago it was the custom to separate the lines with ornaments, such as tiny stars or flags stretching across the page, but these only added to the confusion and they have given way to single-line cut-off rules on most papers.

### INSIDE RIBBONS

Many papers also use "blanket lines" or ribbons across their inside pages in order to dress these pages up and give them a little more life. To lead readers back into the paper, it has become the custom with some newspapers to leave pages 2 and 3 pretty well open for news and pictures and to top these pages with ribbons playing up the lead story on the page.

Sports pages, women's and society pages are frequently topped by such lines. Sometimes these lines are mere department labels; at other times they are written as news heads, featuring the leading story or article. They permit a more interesting make-up on these special pages. Usually such inside lines are set in smaller type—36- to 42-point are the sizes most frequently used.

# ZEPPELIN SAILS OVER FRENCH COAST

## *PARTIES BID FOR 10,000,000 NEW VOTERS*

**CRAFT SPEEDS HOMEWARD AT 80-MILE CLIP**

TWO CONTRASTING LINES

Railroad Gothic for the top line makes an interesting contrast with the Cheltenham italic all-cap head below.

## *Conviction of Hickman, Los Angeles Girl Slayer, Upheld by California Court*


*WEATHER*

Mostly fair tonight becoming unsettled Friday probably followed by showers. Slightly warmer Friday. Moderate southeasterly winds.

# THE CAPITAL TIMES

*Official Paper of the State of Wisconsin*

*HOME EDITION*

Net Paid Circulation Tuesday 26,671

The largest net paid Daily Circulation of any newspaper in Madison or Wisconsin outside of Milwaukee

VOL. 22, NO. 21 | FULL LEASED WIRE OF THE ASSOCIATED PRESS | MADISON, WIS., THURSDAY, JULY 5, 1928 | EIGHTEEN PAGES | PRICE THREE CENTS


**Today**

Enjoy a Car Now.
A Large Red Bull.
A Monkey House League.
Selfishness, a Power.

By Arthur Brisbane

IN BIG cities hundreds of thousands went for their holiday in automobiles. A phonographer said: "Most of the cars are not paid for. In thousands of cases they represent money that might have meant independence in old age."

The automobiles represent money [illegible]

# Italian Fliers Across Atlantic

## Bloodhounds Pick Up Trail of Clinton Slayer

## 205 Die in July 4th Celebrations

**Plane Now Approaching Rio Janeiro**

Expected In Brazilian Capital Tomorrow Morning

CHELTENHAM MEDIUM USED FOR CONTRAST BETWEEN TWO LINES OF CHELTENHAM BOLD

Note the Cheltenham Bold Italic line above the nameplate.

In the Sunday paper, with its special magazine sections, these inside lines find their widest use. They are found over the tops of almost every feature page, and often subsidiary lines in smaller type are used to cut across the center of the page to set off new features.

### INCREASING POPULARITY OF THE SPREAD HEAD

Every headline schedule should include either banner heads or spread heads for large display purposes. But there is considerable question as to how often they should be used.

The *New York Herald Tribune, World, Times,* and *Sun* have broken almost entirely away from the use of banner heads, except when big news warrants them. Instead they use a spread head which ordinarily takes the form of a two- or three-part drop-line extending over two, three, or even four columns. Instead of dropping down into a single-column drop-line again, this deck is usually eliminated, since the spread head itself is in the drop-line form. The remainder of the head is made up of pyramids or hanging indentions and subsidiary drop-lines or cross-lines.

There are innumerable variations of the spread head. Some papers, in order to get larger display with this form of headline, set it in a 48- or 60-point two-part drop-line over five or six columns, then follow that with a two-column two-part drop-line in 24- or 30-point, and finish the head with a two-column hanging indention or pyramid. There are infinitely more possibilities for variety and interesting make-up with spread heads than with a banner. Examples of spread heads are shown on page 230.

From the standpoint of news stand sales, the advocates of this kind of display say that it has decided advantages, for the passerby cannot get his news free of charge by catching it at a glance from big streamers—he gets just enough to arouse his curiosity, and he must buy the paper in order to get the news. In larger cities where many papers are displayed on the news stands, the spread head has another advantage. Because of the number of papers, they must be folded twice, and thus they present only one-quarter of the page to the passerby. A banner head is cut in half by such a fold and is meaningless, but a spread head can be shown completely.

The restricted use of banners has a still greater advantage in that it permits a fairer play of the news. To use a banner

# 27 Planes Reach Kansas City as 4 Fall Out of Derby

Rowland Roars In First After 8 Hours 7 Minutes' Flying Time From N.Y.; Dake Is Close Second

Robertson Lands Craft in Flames

Escapes With Bruises and His Companion Unhurt in 1,000-Foot Plunge; Fort Worth Goal To-day

# PLANE COLUMBIA PASSES TULSA; 2 OTHER NON-STOP RACERS DOWN

Pilot of Levine's Entry Drops a Message to Oklahoma Town.

MORRIS-THAW SHIP CRASHES

Cracks Up in Dark in Indiana—Mamer Down in Wyoming—Four Planes Still Going.

EXAMPLES OF SPREAD HEADS USED BY NEW YORK PAPERS

every day, it becomes necessary to overplay one or two stories. The average day's news holds no story big enough to be blared out in 96- to 120-point type at the top of the front page. But the editor who must have a banner must pick some story and play it up out of all proportion to its importance. There may be several fairly good stories of about equal news value, yet the one that is picked for the banner is magnified many times in the eyes of the reader and is made to appear as extremely important news. Then, when a really big story comes along, the editor has no new cannons to shoot. His overuse of the banner has made it ineffective.

Usually it is a story of sensational nature that lends itself most easily to being played up in the "line," and, as a result, stories of crime and violent death are given an inordinate importance. Many editors purposely play the story that they think will have the best sales value because of its sensational nature, regardless of its news value.

Happily the overdisplay of some of the sensational newspapers has brought a reaction and a tendency toward a saner display among many papers. Edward A. Evans, editor of the *Oklahoma News*, which recently abandoned the use of banner headlines except for extremely important stories, explained the action of his paper in his editorial column as follows:

Many readers of the *News* have asked me why the appearance of the first page of this paper has been changed so noticeably in the last week or so.

The answer to their question is easy. We are simply trying to make the *News* easier and more pleasant to read and at the same time to make it more accurately represent the importance of the stories it prints.

We used to employ glaring eight-column headlines—sometimes two or three of them on a page—on the theory that they helped to sell the papers. I think we were kidding ourselves.

I'm afraid we often succeeded only in making the paper hard to read, while the big black type occupied valuable space that much better might have been used for news matter.

The use of an enormous eight-column headline in every edition, although the story under it may be quite ordinary, leaves no way of calling public attention to the extra-ordinary story that comes along once in a while.

The *News* has quit screaming. Our headlines, hereafter, will talk in a tone better suited to dignified conversation.

There may be times when news warrants the use of one banner headline, but it is certain that there is never any need of flaunting three or four lines across the top of the front page. Solely from the standpoint of effective display, the use of several lines defeats the editor's purpose. All display is no display. Three or four banners, with accompanying drop heads and spread heads, cannot help but fill the top half of the front page with headlines. One line cancels the other; the result is an overdisplay that is entirely ineffective and a confusion of glaring heads that is irritating to the reader.

Smaller papers have copied the metropolitan press. There appears to be little justification for banner heads in the country field where there is no street sale competition.

### TOP HEADS

After the larger display forms, the single top-of-column heads that go over other important stories come next in the schedule.

Russia Gives Adherence to Kellogg Pact
Moscow, in Note to France, Views Treaty as Providing New Chance to Offer Full Disarmament Plan
Gives Reservations, Criticizing Britain's
Reds Admit Neither Admiration nor Enthusiasm; See Moral Restraint

**A**

The top-head of the *New York Herald Tribune* which combines alternate drop-lines and hanging indentions.

There are three different styles of heads in general use. The first, from the standpoint of greatest popularity, is the four-deck type of head shown on the opposite page.

The top deck is usually a two- or three-, sometimes even a four-part drop-line in 30- or 36-point type. A few papers using wide type faces permit the lines of this deck to come out flush with the column rules on either side, but the flush-line head is not as attractive as the drop-line; it looks crowded and is harder to read.

The second deck may be either a pyramid or a hanging indention. The third, in a little larger type, again may be either a two-part drop-line or a single cross-line, while the fourth is a smaller pyramid or hanging indention.

**BUSINESS STOPS AS WINDS RAGE IN PORTO RICO**

**Tropical Hurricane Said to Be Extremely Violent in Virgin Islands.**

**BLOWING AT 80 MILES AN HOUR**

**Storm Moving Northwestward, According to Weather Bureau Warnings.**

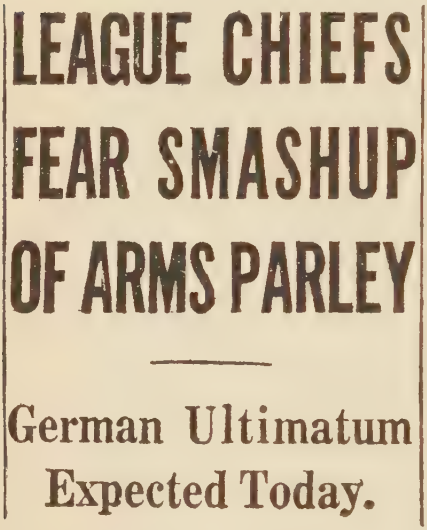
B

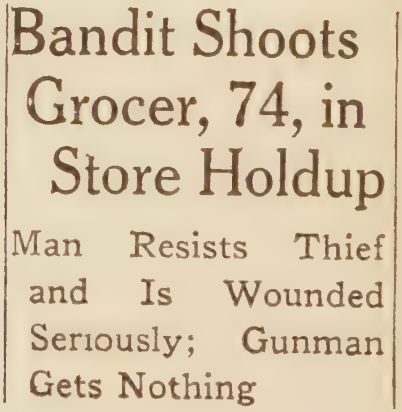
The top-head of the *New York Sun* using pyramids and a cross-line for subordinate decks.

The disadvantages of condensed faces readily can be seen by comparing the headlines above. In the smaller type sizes used in the lower decks of Example B, the condensed letters are very hard to read. The lower decks of Example A are much easier to read. Some papers make the mistake of setting pyramids in all capitals. Capitals are hard enough to read in larger type sizes.

There is no excuse for using them in the small type sizes of the lower decks.

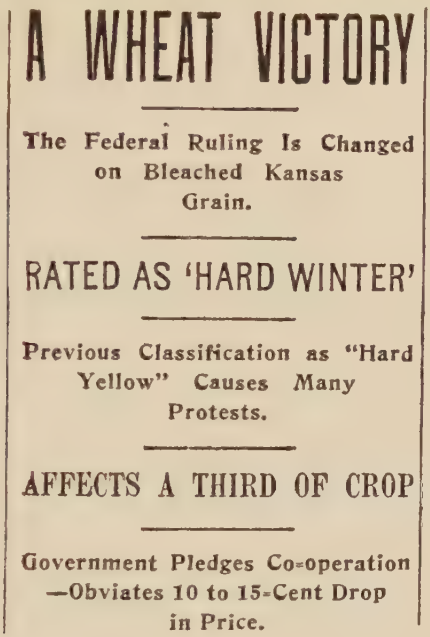
The second type of top deck consists of but two decks, the upper one usually a three-part drop-line, and the second a short pyramid or hanging indention.




The third form of top deck is that used by a few very conservative newspapers which have never adopted the drop-line and still cling to the single cross-line for the top deck, building up

the remainder of the headline with a succession of pyramids and cross-lines as shown below.


A WHEAT VICTORY
The Federal Ruling Is Changed on Bleached Kansas Grain.
RATED AS 'HARD WINTER'
Previous Classification as "Hard Yellow" Causes Many Protests.
AFFECTS A THIRD OF CROP
Government Pledges Co-operation —Obviates 10 to 15-Cent Drop in Price.

This form of headline has the disadvantage of not permitting the headline writer space enough in the cross-line to say anything, and as a result the top decks are usually mere labels.

### HOW MANY DECKS?

Back in the days immediately following the Civil War, it was not an uncommon thing to see as many as eighteen or twenty single-column cross-lines over important stories. With the development of larger display forms, there came a gradual reduction in the number of decks, but many eastern papers still use from six to eight decks in headlines that fill almost one-third of a column before leading into their stories below. Most American newspapers, however, have standardized on four decks for the top heads and two or three decks for the secondary heads between the top of the page and the fold. Four decks should be sufficient to tell all that is necessary to advertise a

story. Using a greater number involves telling almost the whole story in the headline and leaving little for the story itself to do but to duplicate what has already been said.

Several newspapers, such as the *Chicago Tribune* and the *Milwaukee Journal*, use only two decks in their top heads in the belief that most people do not take the time to read any more. It is a question whether many people read more than

CAR BEARING 5 WOMEN AND MAN TOPPLES DOWN BANK

Machine Sideswipes Another on the Highway Near Crockett, Then Careens Over Precipice

Victims, Wearing Evening Gowns, Believed En Route to Vallejo Eastern Star Meeting

the top deck. Certain it is that in a four-deck headline most people never see more than the first and third decks, which are most prominent. Psychological tests have demonstrated that attention value decreases rapidly as the eye reads down through the decks of a headline. It is probable that newspapers in increasing numbers will change to simpler headlines. This does not mean, in any sense, a weakening of display. In fact, one or two well displayed decks, set off by ample white space, show up

more strongly in contrast to body type than a series of decks. When too many display lines are used together they cancel each other and reduce the attention value of the whole headline.

### HOW MANY LINES IN EACH DECK?

The number of lines that can be used in a single deck without destroying legibility also deserves consideration. Most papers have made three lines the maximum number for a top deck dropline. When four lines are used, as in the example opposite, too many display lines are brought together and the whole headline is hard to read.

In pyramids and hanging indentions, four lines have come to be considered the maximum for legibility. Thirty years ago newspaper editors used to run pyramids of as many as ten to twelve lines, attempting to sum up everything that had not been said in the top deck. These long pyramids were exceedingly hard to read, for the eye got tired out before half way through the deck. Four line pyramids and hanging indentions can be read with comparative ease; three lines are even better.

### WHAT SIZE TYPE FOR TOP DECKS?

Newspapers contending in street sale competition very frequently use 30- to 36-point type for the top deck. With condensed Gothics it is sometimes necessary to use 42- to 48-point to get the same relative display. Many newspaper men insist, however, that the use of such large sizes in single-column heads is unwarranted, and that a 24-point headline well set off with white space will give all the display necessary.

Country weeklies often go to the other extreme and use only very small heads at the tops of their pages. It may be that they have no very startling news to display, but they at least owe their readers the courtesy of making their pages easy to read and of displaying the stories under headlines that are big enough so that readers can easily find those they are interested in. Furthermore, 10- and 12-point heads are not heavy enough to hold up the top of the page. In the example of the *Nonpareil-Journal* on page 238, the page seems to sag under the nameplate, and the whole top of the page looks dull and uninteresting.

Fifty-fifth Year

# ALGOMA RECORD-HERALD

"Hew Straight to the Line, Let the Chips Fly Where They Will"

Eight Pages

ALGOMA, WISCONSIN, FRIDAY, OCTOBER 19, 1928 VOLUME 56, NUMBER 19

## Three Head of Cattle Go to State Sale

County Guernsey Breeders Offer Animals With Records

Three of the finest Guernsey cattle in Kewaunee county have been listed for their owners and will be consigned to the state sale to be held at Waukesha Nov. 8. Julius Pflughoeft, Jacob J. Dittrich and George F. Dhein's are the animals to be represented. Every one of the animals to be offered by the Kewaunee county breeders has out standing records and it is expected that there will be no opposition when they are offered to the bidders' ring.

Pfluhoeft of Kelton, 110930 A. R., with a record of 11,990 pounds of milk and 812 pounds of fat in class 305, will be consigned by J. Pfluhoeft. Julius of Kelton was granted the honor of having his animal sold by the state sale committee.

Mr. Peter of Pierce, 94942 A. R., with a record of 12,231 pounds of milk and 522 pounds of fat in class 4a, will be offered by Julius Pfluhoeft. This animal, too, was a prized possession at the Kewaunee county fair.

The third cattle listed to be signed to the state sale comes from the Johnson accredited herd of George F. Dahnke. She is Pamela of Carolina. This cow has a record of 6882 pounds of milk and 305 pounds of fat as a four-year-old. Eight pounds milk and 29.1 pounds fat as a two-year-old, and 6787 pounds milk and 404.5 pounds fat as a 5 year-old. On official test this animal has a record of 55 pounds of milk a day with a test of 4.6%.

### Mrs. Oliver Tombal Thirty Daems. Dies; Was Ill Three Days

THIRTY DAEMS—Funeral services for Mrs. Oliver Tombal were held Wednesday morning at last Sunday at St. Francis Xavier church at Algoma. Rev. Father Aloysius Schinbeck officiated. Burial was in the parish cemetery.

## Chicken Dinner at Forestville Next Wednesday

FORESTVILLE — The annual chicken dinner and sale by the Ladies' Aid of the St. Peter's Lutheran church, Forestville, will take place next Wednesday, Oct. 24, it was announced today. The dinner will either at 4:30 and the sale will be served at the church house. Everyone is welcome. To charge for the supper will be 50 cents.

Next Sunday morning services at St. Peter's Lutheran church will be conducted in the English language.

## PLAN HOOVER CURTIS RALLY AT KEWAUNEE

### Montague Flowers, Noted Nationally as Orator, to Speak

KEWAUNEE—Montague Flowers will be one of the most outstanding orators, with distinguished political names, at the Kewaunee Opera house Friday evening, Nov. 2, under the auspices of the Kewaunee County Republican club, it was announced today by Chairman Lester Bero.

Other Republican meetings in the county time for scheduled are: one at Rio Creek Wednesday Oct. 31 and by Literberry Thursday evening of next week. Atty. J. Ryan Bero of Green Bay and Attorney Gerald Boyle to bring a Republican speaker to each of these meetings. Definite date and time is to be announced later.

## COUNTY SCHOOL BOARDS TO MEET

## TO THE PUBLIC:

Halloween draws near and already signs of its approach are making themselves noticeable to the studying of students along our business streets with long and familiar salutations. Every one enjoys seeing our young people enjoying themselves to the fullest extent, but there are boisterous ones and there are the other quietly enjoyable ones. Boisterous observances of Hallowe'en, but the ones already in evidence at the time of going to press are not desirable.

No boy or girl has any more right to play harmful tricks or pranks at Hallowe'en than at any other time. The marking of windows with soap is considered as vandalism. The law enacted at the last legislature does not serve as a threat, but is equally liable to arrest and punishment in the law as in the other. And if he is arrested it is the parents who must pay the bill.

So let us ask for the co-operation of parents in putting a stop to this common nuisance. Let Hallowe'en prank be confined to the use of corn stalks, pumpkins, and other harmless forms of rejoicing and amusing people as musicians, comedians and dramatic readers should be followed with arrest and fine as well.

Better than all let us co-operate so that it will not be necessary to arrest any one and so all may enjoy Hallowe'en.

J. H. McGOWAN Mayor

## DRAW JURORS FOR AUTUMN COURT TERM

KEWAUNEE—The list of petit jurors drawn for the November term by jury commissioners L. Albert Kane, Kewaunee; Frank Hoffman, Algoma, and Peter Schmidt, Luxemburg. The jurors drawn to serve in the circuit court in Kewaunee county attend court on the first Monday of November. They are as follows:

Leo Sailer, Algoma; Frank Rieder, Algoma; Frank Blind, Casco Town; Chas. Casella, Pierce; Frank Brusky, Pierce; Thomas Nance, Lakes Township; Roy Ewert, Kewaunee; Frank Kuhn, Kewaunee; Gerald Schmidt, Kewaunee; Edward Pinsky, Carolina; Otto Scheer, Luxemburg; Frank Dressen, Casco; Arnold Detsaber, Red Ridge; George Flaherty, Kewaunee; Peter Schmidt, Luxemburg; Henry Schmidt, Luxemburg; Frank Schmidt, Luxemburg; Frank Schmidt, Luxemburg; Frank

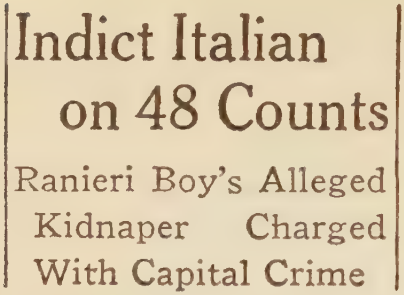
The page of the *Algoma Record-Herald* is better. It is not necessary to ape the large display of city papers, but a 24-point top deck does help the make-up of this paper. It is heavy enough to hold up the top of the page and it displays the news in an interesting and attractive manner. Furthermore, the headlines of this paper have second decks which add to their strength and attractiveness. Two decks should be sufficient for the main heads in a country weekly—they permit just enough room to tell their story in a straightforward and interesting manner. Top heads should be used only at the tops of columns. They are too heavy to go lower in the page.

### SECONDARY HEADS

Between the top of the page and the fold or center of the paper every newspaper has room to display several important stories that are not large enough for top column position and yet worthy of a certain prominence. These secondary heads usually resemble the top heads in form, but have fewer decks and fewer lines in each deck.

200 REPORTED DEAD IN HAITIAN STORM
10,000 Persons Are Homeless, Villages Wiped Out and Many Craft Wrecked.
SCORE KILLED IN ALGERIA
Earth Shocks and Tidal Wave Accompany Hurricane's Destruction in Two Towns.

The *New York Times*, which has a six-deck top head with a top deck of three lines, drops to a four-deck secondary head with a two-line top deck.


Indict Italian on 48 Counts

Ranieri Boy's Alleged Kidnaper Charged With Capital Crime

The *Milwaukee Journal*, though it has only two decks in its top head, varies its form in the secondary head by using only two lines in the top deck and three lines in the hanging indention instead of four.

Many smaller newspapers make the mistake of not using enough good secondary heads, and drop too quickly to smaller subordinate headings. As a result, while the top of the page looks strong and interesting, the center or the area between the top and the fold is very weak. Often these secondaries are not strong enough. If a paper, for instance, uses for the top deck of its top head a three-part drop-line in 24-point, instead of dropping to 18-point for the secondary it would be better merely to use a modified form of the top head, a two-part drop-line in 24-point, with a somewhat smaller second deck, in a two- or three-line pyramid.

Secondary heads are of real importance in inside page make-up on metropolitan papers. Ordinarily the regular top heads are used only on the front page, and the secondary heads are used to lead all inside pages and to top important columns there. On weekly papers, where the top head is usually not more than 24-point in size, secondary heads may be too light in weight to lead the inside pages, and in that case it is better to use regular top heads instead.

### SUBORDINATE HEADS

For smaller stories, headlines in descending sizes from 18-point to 8-point are used. To preserve harmony between headlines it is best to use smaller sizes of the same type face used in the larger heads.

Newspapers which use only two decks in their major heads ordinarily limit all subordinate heads to a single deck. Eighteen- and sometimes 14-point heads are in the form of three-part drop-lines, but most of the 12- and 14-point heads are in the form of a

two-part drop-line. Very small items are headed by single cross-lines in 10- or 8-point. Examples of these are shown below.

Creator of Buster
Brown Dies at 65

Liquor Costs Canada
$180,000,000 a Year

Orang-Utan Born in Zoo

Papers using four or more decks in major headlines limit subordinate heads to two decks, the top deck a two-part drop-line or a single cross-line, and the second deck a two- or three-line pyramid. Small one-line cross-lines are used over unimportant stories. Examples of these headlines are shown below.

**Island Girl, 17, Dislikes Glimpse of Civilization**

**Returns to St. Kilda to Don Old Styles and Customs**

**HUNT WRECKAGE AT SEA.**

**Coast Guard Patrols Off Cape May Rearranged Due to Storm.**

Some papers make the mistake of setting all of their subordinate heads in italics. But italics are not easy to read in small sizes. Furthermore, the use of a large number of italic heads on a page defeats the very purpose of this form of type, which is to offer contrast to the straight news heads. Italics should be saved for feature stories. Two or three italic heads are about all any page can stand. A considerable number of small italic heads, such as those displayed below, will throw the bottom of any page into confusion.

***Lindbergh Plans New Flight to Aztec City***

***Grandmother Makes Air Trip to Scenes of Youth***

Another common mistake is to crowd the small heads down on top of their stories to save space at the bottom of the page. It is much better to set off each head, no matter how subordinate, with enough white space on either side and between lines to make it serve its purpose of opening up the page and providing an interesting spot of color to arrest the reader's eye. Ample leading increases the display value of a headline and enhances its attractiveness to the reader.

### PLACING HEADLINES

In making up his page, the news editor generally plans to keep all the larger heads above the fold of the paper. A top head should never be used anywhere except at the top of the column. Secondary heads are used between the top and the fold —never below the fold, unless the cut cartoon or art layout that they support is so deep that it forces them down. A secondary head is seldom used near the bottom of a column, except in papers which use circus make-up and scatter big heads all over the page.

Care should be taken, however, not to bunch all the major headlines together at the top of the page. Smaller stories with contrast heads should be used in alternate columns between the top heads, and such stories should be long enough to bring the secondary heads, placed under them, away from the top of the page. Cuts and boxes also serve as convenient devices to bring the secondary heads, placed below them, down toward the center of the page.

While that part of the page below the fold is filled out with smaller headlines and stories, make-up editors try to keep this lower half from looking uninteresting by breaking it up with one- or two-column feature stories topped by contrast headings.

FEATURE OR CONTRAST HEADLINES

Most papers try to avoid placing two, straight, blackface heads next to each other. Such "tombstones," as they are called, tend to "kill" each other. If the drop-lines, through overcrowding, are set flush to the column rule on either side, two such flush heads set next to each other appear to merge into one rather puzzling two-column head.

**PARALLEL HEADS OF THE SAME SIZE PUZZLE THE EYE**

When two single-column heads of the same size occur in a parallel position, they appear at first glance like a double-column head, especially if the lines are so long as to be set flush as in the headlines above.

**THIS APPEARS TO BE A DOUBLE COLUMN HEADING**

The weight of the type face is so much greater than that of the column rule that the division of column is hardly noticeable at first, and the reader's eye passes right across the top line into the adjoining column.

To avoid bringing like heads next to each other in adjoining columns, contrast heads are used. These are usually set in italic, though some papers use another straight face that is different enough from the regular headline face to make a contrast.

***Finds Noise Costs U. S. $5,000,000 Weekly***

*'Whisper!' Hoover Is Reported to Be Taking Exercises*

This type of headline, as a rule, is reserved for stories that have a feature or human interest angle. They serve the double purpose of improving the make-up and of placing between the heavy news stories bits of human interest and color as an added means of holding the reader's interest. Ordinarily these heads are set in smaller type and consist of only one deck, a two- or three-part drop-line. Often they are boxed to set them off still more. The following example illustrates the rather unusual type of contrast feature headline used by the *Milwaukee Journal*.

The *Minneapolis Evening Tribune* uses Pabst Oldstyle for interesting contrast in its feature heads between regular Gothic news heads. Note the contrast in the first example shown on page 245.

Contrast heads also are used by some papers over regular news stories where it is desired to secure a more effective and striking contrast at the top of the page. Such heads are sometimes set in a bold italic, but frequently a straight Roman of a face altogether different from that used in the regular one-column news heads is used. Observe the use of Bodoni Bold for contrast with Herald Gothic in the bottom example on page 245.

Cheltenham Bold and Century Bold also are used by some papers with Gothic head schedules. The contrast is made more effective by using upper and lower case between the all-cap heads on either side. The *Minneapolis Morning Tribune* gets harmony as well as contrast by using Caslon Bold between its regular heads of Century Oldstyle.

Some papers make the mistake of using a contrast head that is too black and heavy. The regular news heads look weak by comparison. As a result, the make-up of the page is spoiled, for the weight of the contrast head pushes it out at the center and makes the two corners fall off weakly at either side.

## RURAL VOTERS GIVE PROPOSAL BIG PLURALITY

## Tuneful Gopher Grads Take Wabash Song Off List Until Varsity Wins Over Hoosiers

## ARMED BANDITS WAYLAY WOMAN AND SEIZE CASH

## U. S. REJECTS NAVAL ACCORD

'Utterly Impossible,' Kellogg's Answer to Anglo-French Proposals.

## County Board Selects Site No. 16 For Airport

**Condemnation Proceedings to Be Started Immediately; Expect Field to Be Ready For Use Next Spring.**

## MRS. CROMWELL GIVEN DIVORCE

Decree Awarded Less Than a Week After Petition Was Filed in Reno.

DOUBLE-COLUMN HEADS

For additional variety, most papers include in their schedules one or two types of double-column heads. For feature or human interest stories these heads are usually set in italic. If used at the top of the page, such heads may be given a second deck. In that case, however, it is best to set only the top deck in italic and to keep the pyramid in straight type, for 10- or 12-point italic is hard to read, particularly in a two-column pyramid. Contrast these heads:

*Walker Asks Traffic Solution Through a Survey by Engineers*

**Tells 700 Business Men $500,000,000 Will Be Required to Insure Necessary Improvements and Pledges Immediate Action**

*Poison-Candy Plot Against Princes In Tokio Traced to Man in U. S.*

***Japanese Seized in California for Mailing Drugged Sweets Is Betrayed by Handwriting—Consul to Demand Deportation***

If such feature heads are used to dress up the bottom of the page, they ordinarily are of only one deck to avoid getting too much weight that far down in the page.

*Dies After Giving Blood to His Baby Daughter*

To preserve harmony in tone it is well to choose an italic to match the face used in the major heads. The *New York*

*Herald Tribune,* for instance, which has a Bodoni Bold schedule for its news heads, uses a Bodoni Bold Italic for its feature heads. This provides the necessary contrast without clashing with the other faces. The *Milwaukee Journal,* which uses a Cheltenham Bold schedule, gets a pleasing contrast with Cheltenham Oldstyle Italic for its feature heads.

Rather than overdo the italic by using two such heads at the bottom of the page, some papers set one of them in straight type. The *Milwaukee Journal* uses the following head to balance the italic head mentioned above.

# Texas Youth Is Killed in Fraternity Initiation

Very frequently this type of head is used over stories having a little more of a news than a feature angle.

### JUMP HEADS

Many papers make it a practice of starting a large number of stories on the front page in order to make this page look bright and newsy. The ends of all such stories of course must be "jumped" to some inside page. To avoid confusing readers, a distinctive type of head is used over these "jumps" or "run-overs." This labels the jump immediately, and enables the reader to find it without difficulty.

The *Milwaukee Journal* jump head is distinctive:

## 'Witch' Slayer Takes Stand

[CONTINUED FROM PAGE 1]

Many papers merely repeat the top deck of the front page head and set it in smaller type. This makes it obvious that it is a jump head. When the exact wording of the original head is not used, the jump at least should contain enough identifying

words so that the reader at once will link it with the part of the story that has gone before.

### DIVISIONAL OR FOLO HEADS

Frequently, related stories can be grouped together to save space. Minor auto accidents, for instance, can be put at the end of a larger auto crash story. Or reports of the effect of a storm in other cities can be placed at the end of a local storm story. These "folos," as they are called, usually are separated from the main story and from each other by single cross-lines set in type slightly larger than the subhead. Some papers, like the *Chicago Tribune,* box these folo heads.

**RACES OVER ITALY**

BY DAVID DARRAH.
[Chicago Tribune Press Service.]
BRINDISI, Italy, Dec 10—Dashing

The folo head is used over every division of a story bearing a different date line from that of the lead of the story.

Similar headline forms, called divisional heads, are often used within long stories under a single date line to link together different angles. In the report of a catastrophe, for instance, divisional heads can be used to tie together the accounts of survivors and witnesses, estimates of damage done, reports of investigations contemplated, organization of relief efforts, and other angles.

### SPECIAL DEPARTMENT SCHEDULES

Papers which maintain daily sport sections frequently have a special headline schedule for these pages. Often these heads are not permitted to be used anywhere else in the paper. One Chicago paper, for instance, uses two-column heads only on its sport pages. To make the section still more individual, some papers set their sport heads in a different type face. The *San Francisco Examiner,* for example, while using a condensed News Gothic for its regular news heads, employs the sturdy and individualistic Jenson Bold Condensed on its sport pages.

This tendency to individualize department pages is also seen very frequently on women's and society pages. To give them a

distinctive appearance, special headlines are created, and a different style of make-up from that found on regular news

*News head in News Gothic*

# U. S. REJECTION FAILS TO KILL TREATY HOPES

American Message Studied as London and Paris Continue to Exchange Views on Navies

*Sport head in Jenson Bold Condensed*

# Stanford Reds, Fresno Staters In Tilt Today

'Pop' Warner Expects to Open With First String; Wilton and Harder to Return to Game

pages is used. The use of type faces such as Garamond, Kennerly, and Caslon Oldstyle, which have a decidedly feminine appeal, has done more than anything to make these pages more attractive and interesting to women readers.

Often permanent departments, such as special columns, are run every day under the same head. To make such headings more attractive they are frequently hand drawn and may include illustration. These drawings are engraved, and the electrotypes can be used over and over. Too often special feature, home, and magazine pages get to look all cluttered up with such "stock cut" heads. If several such permanent departments are to appear every day on the same page, it may be well to discard the stock cuts for one or two of them and to write regular feature heads on the subject matter to be covered in the department each day.

### HEAD FORMS CHANGING

The headline forms and their uses, which have been described in this chapter, seem fairly well standardized today, but they may be much different a few years hence. The best headline practices in use today have been evolved from the standpoint of what is most practical for the newspapers and best for the reader. Yet the newspaper editor must be alert to new developments. That does not mean that he must jump at every new fad. There are new type tricks being tried which are merely freakish. After all, the reader may like his newspaper best in the form to which he is accustomed.

### SUGGESTIONS FOR THE STUDENT

1. Search newspapers for examples of each problem and point discussed in this chapter.
2. Prepare complete headline schedules of several different types of newspapers, noting the number of units allowed in each line.
3. With the aid of type catalogues, work out the type specifications for a complete headline schedule, noting the sizes, faces, and measures used in each deck.
4. Practice designing spread heads. Look up good examples in current newspapers. Then lay out practice pages and try working out original schemes for spread head display.
5. Select a small city daily or country weekly whose headline forms you think you could improve. Draw a front page dummy of the paper in its present make-up and write your criticism of its use of headline forms. Then work out a new headline schedule for this paper and draw up a new dummy, showing how make-up could be improved with the new headline forms you have devised.
6. Write a comparative criticism of the headline forms of several different papers, noting differences in legibility and attractiveness.

## CHAPTER IX

### TYPE DEVICES

WHILE the various types of headline forms offer, perhaps, the best means of creating interest and variety in a newspaper page, there are many other typographic devices at the command of the editor. There are, for instance, a number of things that can be done with body type to make pages more attractive.

#### SUBHEADS

The first device that will occur to the beginner is to break up the solid columns of type with subheads. The common practice is to insert subheads between every 125 or 150 words. Placed at such intervals, they make a column seem live and interesting.

To save time in composition, subheads usually are set in boldface of the same size and face as the body type. It will be remembered that the linotype and intertype matrices carry two molds, one lightface and the other usually bold. All that the operator has to do is to shift the position of the line so that the boldface molds come in front of the casting box. The mat position then can quickly be shifted back for the next line so that composition can proceed in straight body type without any delay. Subheads look better when they are set off with a little white space; many papers place a nonpareil slug on either side of every subhead.

When it is desired to preserve more of an even, gray tone and to have less contrast between body type and subheads, the latter can be set in lightface caps or caps and small caps. This differentiates the subheads sufficiently without breaking up the column too frequently with lines of deeper color. A line of caps has the effect of appearing larger in size than a line of the same size set in caps and lower case.

For some papers, however, even a boldface subhead in upper and lower case of the body type is not enough contrast. The

next step is to use boldface caps of the same size. If that is not sufficient, a boldface line in 8- or 10-point can be used. A few papers, in order to make their subheads stand out more prominently, set them in bold italic, but this has the effect of overdoing the italics and, besides, such heads are a good deal harder to read than others.

charges against Mrs. McPherson following her alleged kidnaping last year.

**EXECUTIVES CALLED.**

It was also learned that several former officials and a number of

attitude would be, in future dealings with the nations of the world.

***Cost of War to U. S. Pointed Out***

For the first time and with an

ing 120 decorations to 101 naval officers, 14 decorations to 14 marine officers and 126 decorations to 101 army officers.

**Twenty Medals From Haiti.**

Heading the list of decorations distributed is the Distinguished Service

range of vision a potential crop of 1,700,000 bushels. There is probably no view like it any place else in the world."

GRAZING LANDS A FEW YEARS AGO.

Thus Mr. Cave, member of the state

EXAMPLES OF DIFFERENT STYLES OF SUBHEADS

Customarily the subhead is but a single line centered in the column. It is best not to make it a full cross-line, for a little white space at each end helps to set it off. A few papers use a single line set flush to the left-hand side of the column. A rather different type of subhead is a two-line head set flush to the left-hand side, with one line shorter than the other.

When the story has a two-column lead set in larger type, the subhead must be correspondingly larger. Sometimes two-column subheads are set in type as high as 18-point. Even when the lead

paragraphs are set single-column, but in 8- or 10-point type, the subheads should be correspondingly 8- or 10-point in size.

Often on society pages, instead of using subheads between all items, little dashes are used instead. Subheads may be used over the more important items toward the head of the column, but the smaller items follow, separated only by dashes.

The same plan is sometimes used in the handling of long columns of country correspondence. If the items are all quite short, however, the dashes may be dispensed with. The insertion of a few subheads over some of the more interesting items throughout the column will go a long way toward making these country correspondence columns look less gray and a little more inviting.

Instead of dashes, the *New York Morning Telegraph* has introduced another innovation in the form of decorative triangular spots, as shown below.

# In the THEATERS

"CHEER UP," the new Robert Sterling musical comedy which completes a week's run tonight in Brooklyn, has broken all box-office records for Werba's Flatbush Theater. The S. R. O. sign has been out for every performance during the week. A week's engagement at the Boulevard Theater, Jackson Heights, will precede the Broadway premiere.

▼

AFTER a successful week's run at the Bronx Opera House Hyman Adler's "The Street Wolf" will open at the Garrick Theater New Year's Eve. Prominent in the cast are Mabel Bunyea, Peg O'Connor, Jacob Frank and Richard Beach.

▼

BERT LYTELL, now starring in "Brothers" at the Forty-eighth Street Theater, will spend tomorrow in Camden, N. Y., synchronizing the prolog to the motion picture, "The Lone Wolf's Daughter," which he made just before his return to Broadway and the legitimate theater.

▼

The *Telegraph* uses these spots to separate paragraphs in a column and also occasionally in the place of subheads. They serve

quite as effectively as the old "jim-dash" and are more decorative. They give the page a jaunty appearance.

### CHANGING THE TYPE FACE

The next display device is to vary the face used in different paragraphs for purposes of emphasis or contrast.

A particularly interesting paragraph, for instance, is frequently set in boldface. This is most often done with speech reports or reports of trials in which it is desired to give greater emphasis to some striking statement or bit of evidence. Care must be taken, however, not to overdo this practice, for it will soon make a page spotty and hard to read.

Lists of dead and injured in disaster stories, or lists of winning candidates in election stories, are also frequently thrown into boldface. When the disaster story contains lists of both dead and injured, the names of the dead are often set in bold caps and those of the injured in bold upper and lower case.

The practice of throwing important paragraphs into boldface is found more commonly on sport pages than in any other part of the paper.

**BULLETIN.**

**New York, Nov. 12.—(U. P.)—The Lamport & Holt steamship offices here announced receipt tonight of unconfirmed radio messages that three ships—the Ohio Maru, Santa Barbara and San Juan—had reached the position given by the liner Vestris, had picked up some of the passsengers and crew, and were searching for others.**

---

**New York, Nov. 12.—[Special.]—Fate of the 129 passengers and 209 members of the crew of the Lamport & Holt liner Vestris, abandoned this afternoon in a sinking condition 250 miles off the Virginia capes, was in doubt tonight.**

Important bulletins, as illustrated above, that come into the office too near the deadline to be incorporated in the regular story

[By The Associated Press]

LONDON—The statement that King George's general condition was slowly improving, made in the official morning bulletin from his physicians, was the most welcome announcement that has come from Buckingham palace since his majesty's illness became critical a few days ago.

The medical bulletin signed by Lord Dawson of Penn and Sir Stanley Hewett, said:

**"The king has passed a fair night and his temperature this morning is lower. The general condition is slowly improving and the infective process, which remains severe, is becoming more localized."**

It would probably seem unwise to interpret too optimistically the words of the bulletin for the king has now been ill for 17 days and is granted to be still a very sick man.

Anti-fog appliances, which are designed to keep the air in Buckingham

San Antonio Tex., Nov. 14.—(AP)—Six Brooks field flyers were dashed to death this afternoon when a huge army transport plane crashed near the Corpus Christi highway, south of San Antonio, according to a report received at the emergency hospital of the flying field.

The dead, all privates, are:

**Harry W. Hardesty.**
**Niceforo Villareal.**
**Carl W. Harris.**
**Harry W. Dauldin.**
**Deamer McClusky**
**Irvin Self.**

The accident, it was said, was the most serious involving an army plane

THE USE OF BOLDFACE TYPE IN THE COLUMN

Particularly interesting paragraphs are frequently thrown into boldface for special emphasis.

are set in boldface and placed at the head of the story. As many as four or five bulletins may precede the lead paragraph of the story.

Summaries of programs for conventions or holiday celebrations, or summaries of running stories such as "What Congress Did Today," are also frequently set in boldface and placed at the heads of their stories. See examples on opposite page.

Financial, sport, and humor columns, as well as the familiar editorial "colyum," are frequently enlivened by setting alternate paragraphs in boldface.

*Financial Notes*

**The stock market closed Tuesday with some buying in the final hour.**

* * *

American Can sold above 119, the highest for the present issue.

* * *

**General Electric soared 12 points to 240.**

* * *

Amusements stocks rallied, with Columbia Graphaphone and Radio among the well bought issues.

* * *

Total trade was estimated at 3,750,000 shares.

* * *

**Memberships on the New York exchange sold at $600,000, a new top and $15,000 above the previous sale.**

* * *

Atchison will spend $42,900,000 for improvements in 1929, against an appropriation of $29,000,000 last year.

Whenever a paragraph or section of copy is marked "boldface," it also should be marked for indention of an em or more on each side. This gives it white space to set it off and keeps the boldface matter from looking too tightly squeezed between the column rules on either side.

### EDITORIAL NOTES

Often in wire stories it is necessary to make clear the location of some obscure place, or to explain the political connection of some foreign happening with events that have gone before.

# CROWD WILL HEAR AL

FRIDAY.

3:30 p. m.—Arrival at Milwaukee road depot; reception at station; drive out Wisconsin av. and return to Hotel Schroeder.

SATURDAY.

11 a. m.—Reception to newspaper men.

11:30 a. m.—Trip to Soldiers' home and return to hotel.

2 p. m.—Public reception.

3 p .m.—Reception for Mrs. Smith in Schroeedr lounge.

8:30 p. m.—Address at Auditoriutn.

10:10 p. m.—Return to hotel.

SUNDAY.

10 a. m.—Will attend mass.

2:30 p. m.—Depart for Rochester, N. Y.

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For once Milwaukee's great Auditorium will prove to be wholly inadequate. When Gov. Alfred E. Smith

BOLDFACE FOR SUMMARIES

It is common practice to set such summaries in boldface at the head of the stories to which they relate.

**WHAT CONGRESS IS DOING**

**Congress convenes at noon, Vice President Dawes and Speaker Longworth calling Senate and House to order.**

**Chaplains offer prayer in both houses.**

**Rolls called to establish quorum.**

**Both chambers swear in new members and appoint committees to notify President congress has convened.**

**House ways and means committee meets to consider proposed bill to revise tariff.**

---

(By The Associated Press)

WASHINGTON.—Congress assembled and prepared itself in short order today for the three busy months ahead and for the special session Herbert Hoover has promised should it be necessary for farm relief.

The day the German fliers made the first westward crossing of the Atlantic and landed at Greenley Island, off Labrador, few readers had ever heard of this island, and it was necessary for the newspapers to include in their stories an editorial note explaining its location.

Frequently in political campaigns it is necessary to precede stories by editorial notes, explaining the background of the news or perhaps calling attention to related stories in other parts of the paper.

*Wisconsin, in whose principal city, Milwaukee, Gov. Smith spoke last night, has gone Democratic only twice in Presidential elections since 1872, once in 1892 for Cleveland and once in 1912 for Wilson. In 1924 President Coolidge ran second, La Follette carrying the State on his Progressive Party ticket by 140,000 plurality. In 1920 Harding (Rep.) was given a plurality of 350,000.*

*Capture of the progressive votes for Gov. Smith has been the aim of the Democrats in this campaign, and has received considerable support from State progressive leaders, among them Senator Blaine.*

---

**By Charles Michelson**
**Staff Correspondent**

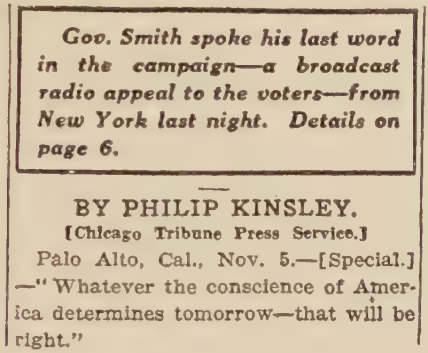
**AUDITORIUM, MILWAUKEE, Sept. 29.—"The cure for the ills of Democracy is more Democracy."**

**In this phrase of Jeffersonian flavor Gov. Smith to-night summarized his remedy for the multiplying evils that have come in the train of the Eighteenth Amendment and the Volstead**

Some papers make it a practice, in handling big stories that run on for days and weeks at a time, to include at the beginning of each day's story a brief summary of preceding developments. Again, there are times when a series of articles is being run, and a little note of some kind is needed at the head of each article to identify it with the rest of its series.

While some papers set such explanatory "editor's notes" in

boldface, the more common practice is to set them in italic. They are less conspicuous in that form and are readily identified as being something apart from the regular news matter. When



*Gov. Smith spoke his last word in the campaign—a broadcast radio appeal to the voters—from New York last night. Details on page 6.*

BY PHILIP KINSLEY.

[Chicago Tribune Press Service.]

Palo Alto, Cal., Nov. 5.—[Special.]—"Whatever the conscience of America determines tomorrow—that will be right."

italics in small sizes are not available, the same effect can be obtained by setting such editorial notes in a smaller size of the body face, either 6- or 5½-point. A few papers enclose such explanatory matter in brackets.

### LEADING

Another display device is to introduce white space between lines of body type. Many papers use leads between the lines of the first paragraph or two of all principal stories in order to open up the solid type and to lead the reader down into the story.

### PLAYING CHANGES ON TYPE SIZES

One of the easiest ways of obtaining added emphasis is to set the lead of a story in larger type. Beginning paragraphs of important stories are frequently set in 10-point or 8-point type. Two-column leads on very important stories are sometimes set in 12-point. Some papers, to give special play to their front page stories, set the leads of all major stories in 10-point.

If a 10-point lead paragraph is used, care must be taken that the drop from 10-point to the regular 7-point body type is not made too abruptly. This can be avoided by setting a few lines immediately following the 10-point lead in 8-point, so that the drop into 7-point is more gradual. If that is not practical, somewhat the same effect can be obtained by double leading the first

few lines of 7-point. Introducing more white space between these lines makes them seem larger. A gradual drop creates the effect of movement, which helps draw the reader's eye down into the story.

BUENOS AIRES, Dec. 14.—Argentine officials today showed Herbert Hoover the capital's wonder spots, taking him for a motor ride through the parks and business district and into their ornate public buildings. — 10-POINT LEADED

Alarmed by the communist plot against Mr. Hoover, and by the result of the wild reception given the Hoover party last night when scores were trampled under foot and women fainted as the crowds pocketed the Hoover car, police today took extra precautions to guard the president-elect. — 7-POINT DOUBLE-LEADED

**EMBASSY IS GUARDED.**

Mounted soldiers as well as scores of policemen are on guard at the American embassy.

Mr. Hoover, accompanied by the mayor of Buenos Aires, used a closed car for his sightseeing trip. His itinerary was kept secret to prevent crowds collecting.

Mr. Hoover saw a city comparable to the cities of the United States in every way. He saw a postoffice which is ultramodern in building and equipment. He visited the police headquarters. The city firemen gave a drill for him. — 7-POINT LEADED

At each stop his escorts proudly explained it all to him. When his car stopped at each public building a small crowd would quickly gather and vigorously applaud.

Frequently it is advisable to use a type smaller than the regular body type. Itemized points in a program, statements by candidates, excerpts from speeches or publications quoted in news stories are often indented on each side and set in 6-point type. This not only saves space but distinguishes this matter from the straight news parts of such stories.

Minor stories, lists of names, and long tabulations are usually set in smaller type to save space. Minor stories are frequently grouped into convenient columns of "City Briefs" or "State Briefs." To get a little more life into an otherwise rather dull looking, closely set column of "State Briefs," the *Milwaukee Journal* sets the date line and every other item in boldface. The *Chicago Tribune,* on the other hand, instead of assembling these small stories into columns of briefs, sets them in agate with a one-line caption and uses them as convenient space fillers at the bottom of columns throughout the paper.

Names of local persons are highly valued by newspapers, for every reader likes to see his name in print. Whenever possible, lists of those participating in important functions are included at the ends of stories. But as lists of names take up a great deal of space, the practice on most papers is to set such lists in 6-point or even 5½-point type. Such lists may be run in paragraph formation, but they look neater and are easier to read if set in one-half or one-third column measure, as below.

Recent reservations for the Milwaukee-Downer club dinner dance at the Wisconsin club on Thursday include:

Messrs. and Mmes.:
Carl Oestreich
Charles P. Emery
Gustave J. Sengbusch
Elmer Van Uxem
Armin Finger
Roland Effinger
Drs. and Mmes.:
Archie Stocker
Ralph Sproule
Mrs. Leona Moore
Misses:
Lorraine Maas
Helen Miller
Vera Demand
Beatrice Klafter
Goldie Philips
Marguerite Safford
Helen Read
Margaret Logemann
Milda Wegner
Messrs.:
Bae Canavan
Barnie Schefftel
Harold Shapiro
Elroy Kellner
Harry Lenartz
Andrew Boge
Ray Read
Ray Newman
Charles Klinger
John Diefendorf
Leonard Dodge
Henry Anfschutz
Dr. A. H. Bassmat

The third of a series of six plays to be given by the Wisconsin Players is Sean O'Casey's "Juno and the Paycock." Tentative dates have been fixed for Feb. 5 to 8.

Tabulations such as weather reports, sport summaries, and box scores are customarily set in agate. In a long sport summary, a little more life can be introduced by setting alternate sections in agate boldface. In the example at the top of the next page note how the agate permits doubling lineups and scores within the single column.

**Evanston, Ill.**—(AP)—Ohio State suddenly snapped out of its losing ways Monday night and handed Northwestern a 31 to 28 trimming in a Big Ten basketball game that was a thriller.

The Buckeyes jumped into the lead by some sharpshooting by Erbin, who caged four field goals in the first half. They continued to pile up their margin until several Northwestern substitutes entered the battle and came within two field goals of turning the tide, which once seemed hopeless.

Northwestern's offense was nullified by frequent fumbles, while Ohio State displayed a smooth working attack. Both were weak on defense.

Summaries:

| OHIO STATE | FG | FT | F | NORTHWESTERN | FG | FT | F |
|---|---|---|---|---|---|---|---|
| Ebans,f | 3 | 0 | 2 | Gleichmann,f | 2 | 3 | 0 |
| Erbin,f | 5 | 3 | 1 | Gleif | 1 | 2 | 1 |
| VanHeyde,c | 4 | 2 | 2 | Whelan,f | 2 | 0 | 0 |
| Fesler,c | 1 | 0 | 2 | Bergher,f | 0 | 0 | 2 |
| Larkins,g | 0 | 0 | 4 | Walter,c | 2 | 2 | 0 |
| Cox,g | 0 | 0 | 0 | Marshall,g | 1 | 1 | 2 |
| | | | | Mundy,g | 1 | 0 | 1 |
| Totals | 13 | 5 | 11 | Haas,g | 1 | 0 | 0 |
| | | | | Totals | 10 | 8 | 6 |

Officials — Referee, Lane (Cincinnati); umpire, Maloney (Notre Dame).

Obituaries, births, marriages, and other records likewise are often seen in nonpareil or agate. To get more life between the

**BECKER**—Charles E., suddenly, at Scarborough, N. Y., November 1. Funeral services at the family home at Scarborough, November 3, at 11:15 a. m. Cars will meet the 10:10 a. m. express train from Grand Central Station at Ossining. Returning to New York from Scarborough by 12:01 train or later.

**BECKER**—Dr. Clayton Adelbert, father of Mrs. Maude Farrar, of 12 East 97th st., New York, in his 78th year, after a long illness, at his late residence, Rye Lake Farm, White Plains, N. Y. Funeral private, from his late residence, Saturday, November 3, 1928, at 1 p. m. Spring Water, Livingston County, papers please copy.

**BEEBE**—On Thursday, November 1, 1928, Allen M. jr., beloved son of Captain Allen and Mary L. Beebe, in his 26th year. Funeral services at his late residence, 135 Prospect st., Stapleton, Staten Island, on Saturday, November 3, at 2 p. m. Masonic services Friday, November 2, at 8 p. m. Interment private.

closely set lines of small type, the distinguishing names at the beginning of each item may be set in boldface or in lightface caps. Some papers make each item a hanging indention by let-

ting the name or heading project to the column rule and indenting the rest of the agate matter one em.

### MARKET PAGES

The market page is usually the deadest looking page in every newspaper. But there is no reason why financial reports and stock market quotations cannot be displayed attractively and interestingly. Many papers are trying to brighten up their financial pages with more interesting headlines, with charts and graphs. Instead of setting all market stories in 6-point, as once was the custom, they are setting the leads in 8- or 10-point, or at least in well leaded 7-point. For variety in make-up, some stories are given two-column leads in 10-point. The body type of all major stories is set in 7-point and leaded two points to give it an open, readable appearance.

The long tables of market quotations, of course, have to be set in agate, but these columns of fine print can be made more readable by using wider columns that will permit more white space between the divisions in each table. The choice of either Ionic or Ideal News face is preferable to any of the lighter faces because of their greater legibility in small sizes and because their slightly thickened strokes make the type in mass a little bolder, a little more interesting and readable, than masses of very fine gray print.

### COMBINATIONS OF TYPE FACES AND SIZES

Often in feature stories of the "sidelight type," a heightening of interest is secured by setting the different incidents in different faces and sizes of type.

In the example on page 264, the regular body type has been alternated between boldface and italic.

Note also the use of tiny stars to separate the items.

Some papers, to get still greater variety, set occasional paragraphs in 6-point.

Another place where combinations are valuable is in setting up the by-lines of correspondents or star reporters. There are a number of combinations possible. Many papers use 10-point bold caps for the signature and 8-point upper and lower case for the credit or explanatory line below. Others use 8-point bold caps

# *Vestris Sidelights*

## Fears Wreck Has Spoiled Romance

New York—Gaetano Abbedini, one of the Vestris survivors who was on his way to Buenos Aires to marry the sister of a friend, a girl he had never seen, is afraid his romance is ended. "I don't believe she would be willing to come back with me by sea now," he explained. His wedding clothes and presents he was taking south went down on the ship.

* * *

*The tackle on lifeboat No. 13, some of the passengers said, was jammed. The ship was already in its death lurch. A big wave caught the boat, tore it loose from the tackle, carried it clear of the sinking ship. Lucky 13.*

* * *

A cat and a dog were among the survivors. A wire haired fox terrier was rescued Tuesday morning by the American Shipper after it had spent the night in an open boat in the arms of its owner, Mrs. Earl Devore. The cat, a striped tiger tomcat, was regarded as a mascot by the ship's crew and was saved by its owner, Alfred Dinely, assistant steward, who carried it all night in his arms until picked up by the American Shipper.

* * *

**The steamship Montoso arriving in Boston Wednesday heard for the first time of the wreck of the Vestris although it was but 25 miles away when the ship first encountered serious trouble. The Montoso carried no wireless.**

* * *

"It might have been worse," said several passengers of the Vestris, in remembering their ship sank in the gulf stream, which is several degrees warmer than other parts of the north Atlantic. The water was much to be preferred to the air, they said.

* * *

**Sharks which infested the warm waters of the gulf stream were an added menace to victims of the Vestris disaster. Several survivors told of seeing one of the huge fish tear human bodies.**

* * *

Each surviving passenger of the Vestris was given $20 by Lamport & Holt officials on landing in New York. The money was for hotel expenses.

---

*Two men who had booked passage on the ill fated steamship and whose names had appeared in some lists of the misisng were found to be safe.*

*M. R. Rosse, export manager of the Fry Equipment corporation of Rochester, Pa., revised his plans just before the ship left New York, and Cenaro Panzaratta of Pittsburgh postponed his trip to South America to visit relatives in New Jersey.*

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USE OF BOLDFACE AND ITALIC WITH REGULAR BODY TYPE.

for the signature with a 6-point italic credit line. If in addition there is also a copyright line to go below, this usually is set in plain agate. Frequently both the credit line and the copyright line are enclosed in brackets. Examples of some common practices in the use of by-lines are shown below.

BY JAMES L. WEST.
Associated Press Staff Writer.
WASHINGTON, D. C., Jan. 8.-(AP)-President-Elect Hoover talked

*7-Point Light Caps with Agate*

By KARL H. VON WIEGAND
Copyright, 1928, by King Features Syndicate, Inc. World rights reserved, except on the European continent. Reproduction in whole or in part strictly prohibited.
FRIEDRICHSHAFEN, Oct. 9.—The Graf Zeppelin, with

*10-Point Bold Caps with Agate*

By Mark Sullivan
*By Radio to the Herald Tribune*
Copyright, 1923, New York Tribune Inc.

*10-Point Upper and Lower Case with Agate Italic and Roman*

BY ARTHUR SEARS HENNING.
[Chicago Tribune Press Service.]
Washington, D. C., Jan. 13.—[Spe-

*9-Point Bold Caps with Agate Bold*

BY FRED C. SHEASBY
OF THE JOURNAL STAFF
Madison, Wis.—The Kohler admin-

*6-Point Caps with Agate Caps*

By RAYMOND GRAM SWING
*Evening Post Foreign Service*
*Copyright, 1930, by N. Y. Evening Post, Inc.*
LONDON, Jan. 27.—Two 10,000-ton

*7-Point Bold Caps with 6-Point and Agate Italic*

## INITIAL LETTERS

The use of initial letters is a device that has been brought over into the newspaper from the magazines, first to newspaper magazine pages and later into news columns as well.

Initials provide spots of interesting color in a page. If well chosen, they contribute a good deal of variety and life. The use of initials is older than the art of printing itself, for the early

manuscript writers used beautifully illuminated art initials to mark the beginnings of new groups of type matter in their books.

In newspaper magazine sections or on pages where long serial installments are being run, initial letters are a convenient means of breaking up long columns of type matter. Subheads would obviously be out of question in a serial story, but initial letters inserted at convenient breaks in the story can make an otherwise dead looking page very attractive and interesting.

The use of initials was next carried over to special department pages, such as society, women's, club, music, art and drama pages, and placed at the beginning of all major stories or features. They have recently found their way into many editorial pages to lend spots of color on a page where they are much needed. They help set off each editorial and give the whole page more distinction and dignity.

Initials are often used in special columns to head off the separate items, for instance in a column of political gossip, sport "dope," book talks, or theater comment. Note how the initials in the column on the opposite page help to keep it from looking long and uninteresting.

Some smaller city papers have brought initials over to their front pages and begin each major story with an initial. A few papers reserve initials for the beginnings of all feature stories.

### SPECIFYING INITIALS

Usually initials are either two lines or three lines in depth, though at the beginnings of long articles on feature pages they may be set four and even five lines in depth. Frequently the first initial used is three lines and the subsidiary ones below only two lines.

The lines at the beginning of the paragraph are indented to accommodate the initial, which is set into the body as if it were mortised. Since the initial is the first letter of the first word in the paragraph, uniformity is obtained by setting the rest of the letters in that word in capitals. If the beginning word is very short, such as *in* or *at*, the second word is also set in capitals. This serves to unite the initial with the body type and it gives an even top margin with which to align the top of the initial.

The initial chosen should harmonize with the type with which

## STATE AND COUNTY NEWS

# KALNES SAYS

*Pumpkin Hollow Program Friday--Rev. Walstead Tells About Pioneer Life In Minnesota --- Tobacco Acreage Will Be Increased This Year.*

PUMPKIN HOLLOW'S peppey community club doesn't shy at the sub-zero weather. A regular meeting is announced for Friday night this week. And they claim that they will have full house at the Pumpkin Hollow schoolhouse regardless of weather conditions.

I. M. KALNES

The writer of this column has been invited to speak on "John Hanson, the First President of the United States." But they do say that the rest of the program will be good, so probably one short speech won't make too many stay away.

* * *

STORIES of pioneer days always interest, because our fathers or grandfathers were pioneers or some relative somewhere went through the pioneer difficulties. Many of our people in southern Wisconsin have uncles or aunts who pioneered in Minnesota or even brothers and sisters who went through the pioneer stages in the Dakotas.

The Rev. J. N. Walstead of the Trinity Lutheran church in Madison tells about pioneer days in Minnesota, re-

USE OF INITIALS TO BRIGHTEN UP A COLUMN

it is used. The simplest method is to use a capital letter of a larger size of the same type used in the body. Care should be taken that the initial is not too heavy and black and that initials are not used too frequently, or the page will look spotty.

The editor will also probably want to be considerate in his use of initial letters because they mean extra work in the composing room. The linotype operator must indent his lines as specified, and then these blank spaces must be sawed out of the linotype slugs to make room for the capital of larger size, which is inserted by hand.

### DOUBLE DEPTH FIGURES

For the sake of variety and to lend special emphasis it is also possible to use figures of two or three lines depth mortised into the text just like initial letters. Such usage is effective in giving extra display to the points in a program, treaty, or agreement.

## Kohler's Program

Highlights in Governor Kohler's recommendations to the Wisconsin legislature contained in his message to the two houses this morning included:

1 A full-time, three-man highway commission, appointed by governor subject to approval by senate.

2 A consolidation of departments now performing parallel activities.

3 A revision of the income tax law to effect a reduction on moderate incomes to be effective before payment of taxes this year.

4 A state director of purchases to do the purchasing for all state departments.

As with initial letters the linotype operator indents the text matter for two or three lines as specified. The blank space on the slugs is sawed out and the large size numeral is set in place by hand.

Note how the double depth figures augment the display and help make clear the points of the program, shown on the opposite page.

### THE CUT-IN SUBHEAD

Another device that has about the same value as an initial letter in a column is the rather fancy type of subhead illustrated below, sometimes used on the editorial page or in columns of political or dramatic comment. It is what printers call the "cut-in note." Some newspapers call it the "New York subhead."

> once in those cities where it was tried temporarily accomplished what its sponsors professed
> **State Control Failed in Most Cities**
> in advance to believe, that is the elimination of politics in the management of the force. Indeed the evidence indicates just the reverse. The police department was merely lifted from one set of political influences into another. Title was

It appears as if the subhead had been mortised into the text, but as a matter of fact it is set like straight composition on the linotype. The operator indents the first line of the text to be cut in to leave a blank space above the subhead. At the beginning of the next line he starts the first word of his subhead and sets it in 7-point boldface, skips a space or two, and finishes the line with the text set in 7-point body type. The next two lines are handled in the same way, and the one below is indented again to provide a bit of white space below the subhead. Thus it requires no change of magazine, since every matrix has both a bold and a lightface mold. It is a bit tricky, however, and linotype operators would probably complain if they had to bother with very many such subheads. For an occasional column of comment, however, it is an effective display device and helps to break up a long column of text matter in much the same way as does an initial letter.

INDENTIONS

To give greater emphasis to a certain section of a story or to a short feature story, the type may be indented to set it off with more white space. The mere change to a narrower rectangular form also adds to the attention value.

Indentions offer one of the handiest display devices at the command of the editor. They are to be commended, too, because

**6,714,400 SHARES SOLD IN MARKET'S BUSIEST SESSION**

Surpasses Previous Mark Made Only Monday by 1,043,800 Shares

**CURB MARKET REACHES NEW HIGH POINT ALSO**

Surprisingly Low Brokers' Loans Report, Expected to Be 50 Times as Large, Given as Cause of Outburst

New York, Nov. 16—(AP)—All trading records on the New York Stock exchange were smashed today when 6,714,400 shares changed hands in a hysterical outburst of bullish

***Families of Vestris Victims Stand Little Chance for Damages***

New York, Nov. 16—Congressman F. H. La Guardia declared tonight the families of the victims of the Vestris disaster stand virtually no chance of collecting damages from the Lamport & Holt lines for the loss of their relatives.

Congressman La Guardia, himself a lawyer of note, has completed an examination of both United States statutes governing maritime liability and of England's admiralty law. In his opinion, any damages received by families of the dead will be by voluntary settlement on the part of the owners.

**FARMING BETTER, COOLIDGE ASSERTS; REVIEWS INDUSTRY**

they create no extra work in the composing room. The linotype operator merely presses his space-band bar at the beginning and end of each line and the indention is accomplished. Sawing of slugs or rules is not necessary, for the blank space on each end of the linotype slug takes care of the indention.

Many editors who burden their composing rooms with the work of making a great many boxes for both stories and heads

fail to realize that they can get much the same effect as a box by means of indentions. A framework of white space around a short feature story, for instance, will set it off quite as effectively as if it were boxed.

Observe in the examples shown that the column rules and the cut-off rules above and below frame the story quite as well as if it were boxed and that the border of white space sets it off even more effectively than the usual box. The indention in the *Christian Science Monitor* story is given added attention value by the use of a distinctive cut-off rule, which directs the eye into the story.

## New Concrete Posts to Guide Motorists

SPECIAL TO THE CHRISTIAN SCIENCE MONITOR

Detroit, Mich.

NEW concrete markers will soon point the way along Lincoln Highway, replacing the wood and tin signs now in use. The new markers will be in the shape of square posts, the sides facing the motorist bearing blue arrows to indicate correct direction and the side facing the road carrying the familiar tri-colored marker above which will be imbedded a bronze medallion of Abraham Lincoln.

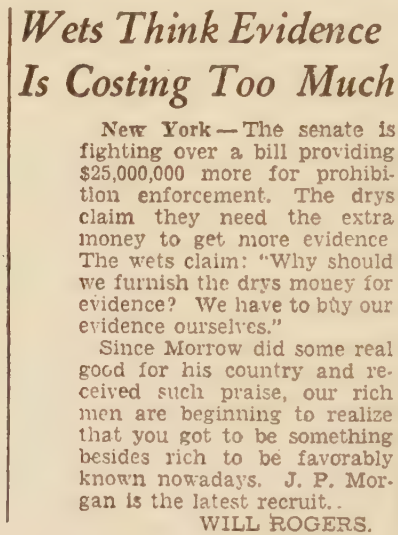
Aside from the medallion, the markers will be solid concrete, even to the arrows and tri-colored stripes, which will be of colored concrete.

Newspaper practice has established certain rules in regard to indentions. Whenever matter is set in a different face or size from that of the body type it is customary to indent it on each side. This is particularly necessary in the use of boldface, for otherwise it looks crowded and hard to read.

All stories intended to go within boxes also are indented one em on each side. This leaves sufficient room on either side for the rules forming the box and also permits a little white space between text and rules—to keep it from looking squeezed.

When the matter to be indented is composed of a paragraph or two out of a longer story within the regular column rules, the indention is usually only one-half em on each side.

Novel indentions are used by some papers to lend variety to their pages. The *Milwaukee Journal* makes its daily Will Rogers



***Wets Think Evidence Is Costing Too Much***

**New York**—The senate is fighting over a bill providing $25,000,000 more for prohibition enforcement. The drys claim they need the extra money to get more evidence The wets claim: "Why should we furnish the drys money for evidence? We have to buy our evidence ourselves."

Since Morrow did some real good for his country and received such praise, our rich men are beginning to realize that you got to be something besides rich to be favorably known nowadays. J. P. Morgan is the latest recruit..

WILL ROGERS.

feature distinctive by indenting the type matter two ems on the left-hand side and bringing it flush to the right-hand column rule. The headline is brought flush to the left, which gives the whole arrangement the effect of a hanging indention.

### BOXES

Boxes can be used in any number of ways. Next to the use of a picture, they serve better than anything else to break up rows of straight news heads and to give balance to the top of a page. They help greatly in improving make-up by providing eye-arresting spots—bits of white space and color—between the heavier news matter. The *New York Times*, which seldom uses cuts in its news columns, daily employs boxes in alternate columns between its major heads, as illustrated opposite.

Boxes are used by many papers not only to improve their top page make-up, but to brighten up the bottom of the page as well.

Boxes are a convenient means of playing up outstanding points or striking facts in a long story to give the reader a digest within a small space. The President's message to Congress is usually considered important enough to be run in full by metropolitan papers. But, for the convenience of the reader, the main points in this address are summarized in a two-column box, which incidentally also serves to break up the long solid columns of reading matter covering the text of the message. A second box may be used to play up interesting excerpts of striking statements, under some such head as "Hooverisms."

KELLOGG PACT WINS EQUALITY IN SENATE WITH CRUISER BILL

Truce Reached by Which Each Will Share Time After Holiday Adjournment.

BORAH LEADS COMPROMISE

His Plan Is Accepted After Naval Measure's Foes Caused Halt by Filibuster.

BOTH NOW CLAIM MASTERY

New Endeavor to Displace Warship Bill Is Likely to Reopen the Battle on Jan. 3.

*Coolidge to Sit for Portrait For Gallery of Notables Here*

*Special to The New York Times.*

WASHINGTON, Dec. 20.—President Coolidge today consented to have his portrait adorn the walls of the New York Genealogical and Biographical Building, New York City.

The organization is seeking the portraits of leading Americans for the gallery. Portraits of Senator Depew and Elihu Root have already been made. Secretary Mellon has been selected for a place.

Clarence W. Bowen, president of the society, with Senator Bingham of Connecticut, today obtained the President's consent for a portrait.

BRITAIN IS THE FIRST TO SALUTE NANKING

Warship Fires 21 Guns as Sir Miles Lampson Presents

KING GAINS FURTHER; HIS PROGRESS NOW 'ON A FIRMER BASIS'

Five Doctors Reassure Public That Heart Is Stronger and Breathing Better.

GENERAL STRENGTH GROWS

Long Statement After Consultation Warns, However, That 'Exhaustion Remains Profound.'

RAY THERAPY TO CONTINUE

Ruler's Improvement Relieves British and Is Held a Happy Augury for the Christmas Season.

Often in a big election story, boxes summarizing the results of the election are used within the text of the story or in the column adjoining. In stories of accidents or disasters, the lists of dead and injured are frequently boxed and placed within the text matter right after the lead.

Many times in the handling of a big news story some interesting human interest story comes to light—a sidelight, as it were, on the main story. When the Mississippi flood story was at its height, for instance, there came over the wire one day a little story about a stray dog that had wakened the family that had

befriended him, and so roused the town when the levee began to give way. It was too good a bit of human interest to bury. On the basis of its news value it would have made only a tenth or eleventh folo to the main flood story, but by putting this story into a box in an adjoining column, many a news editor was able to play it up as a sidelight to the big story.

An alert news editor will find many uses for boxes. Care must be taken, however, not to overdo their use. Too many boxes on a page make it look spotty and ill-arranged. Many papers use boxed heads over all special features and syndicate departments. As a result, their home or magazine pages, women's pages, and often editorial pages look cluttered up with boxed heads. It is better to vary some of them with regular feature headings.

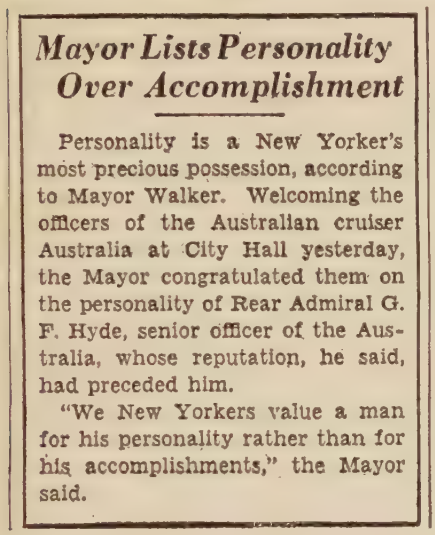
Boxes are made of metal ruling. Usually a side-line rule is used so that the corners can be made to meet perfectly. The box may enclose only the headline, or it may enclose both headline and story. But in either case, it takes extra time in the composing room to make the box. True, most composing rooms have rules, leads, and slugs all ready cut to make almost any size box that may be called for, but still it takes extra work and time to make them, and the editor will do well not to burden his composing room too much.

A few years ago newspapers used very fancy borders for their boxes. There were "flag boxes" made with borders of tiny American flags, "block boxes" and "dot boxes" made with borders of black squares or dots. One of the favorites was the "star box" made with a border of black stars; another was the "black diamond box" made, as the name indicates, with a border of tiny black diamonds. Such boxes were easy to make because the operator could do it all on the machine by simply setting a little star or diamond at the beginning and end of each line and then setting two solid lines of these ornaments for the top and bottom of the box. But these fancy boxes have gone out of favor, for such devices were only confusing to the reader and detracted from the appearance of the page. Today the plain rule border is used almost entirely.

### HOW TO HANDLE BOXES

In setting matter to go within a box, it should be indented one em on each side. For a 12½-em column, this means that the

type matter to go within a box should be set only 10½ ems wide. That will allow one-half em on each side for the box rules, which is just what a nonpareil rule takes. Then it also will provide a margin of one-half em on each side between the box

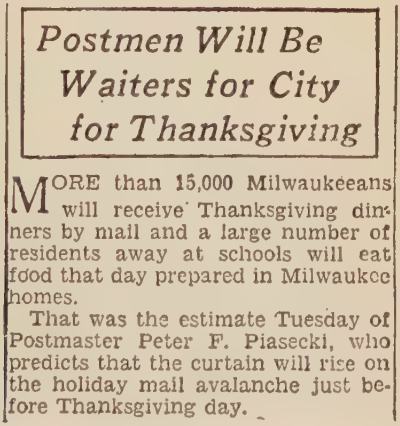


**Mayor Lists Personality Over Accomplishment**

Personality is a New Yorker's most precious possession, according to Mayor Walker. Welcoming the officers of the Australian cruiser Australia at City Hall yesterday, the Mayor congratulated them on the personality of Rear Admiral G. F. Hyde, senior officer of the Australia, whose reputation, he said, had preceded him.

"We New Yorkers value a man for his personality rather than for his accomplishments," the Mayor said.

If not too long the whole story may be enclosed in a box. Otherwise merely the head may be boxed.



**Postmen Will Be Waiters for City for Thanksgiving**

MORE than 15,000 Milwaukeeans will receive Thanksgiving dinners by mail and a large number of residents away at schools will eat food that day prepared in Milwaukee homes.

That was the estimate Tuesday of Postmaster Peter F. Piasecki, who predicts that the curtain will rise on the holiday mail avalanche just before Thanksgiving day.

and the type matter. Without this white space on either side, the type matter looks as if it were crowded, and the whole box looks unsightly. Furthermore, the white space sets off the type matter within the box more emphatically and gives it added attention value.

Some papers make the mistake of trying to get added emphasis by using a heavy black border for the box itself and by setting the type matter within in boldface type. Such a practice is overdoing display. The mere fact that the story is set in a box is giving it prominence enough. Black boxes look overdone and they detract from the appearance of the page. The type matter should be kept lightface and should be leaded a bit fuller than straight matter. When surrounded by a margin of white space

**Princess Will Become Ruler of Five Millions in Native Indian State**

Bombay, Ind., Oct. 27.—(INS.)—A woman will be the next ruler of the Indian state of Bhopal and its 5,000,000 Mohammedan subjects.

The Nawab of Bhopal, the second greatest Mohammedan prince in India, has decided his state shall revert to the tradition of rule by women, and has nominated his daughter to succeed him.

Bhopal is the only state in India where, until the accession of the present nawab, women ruled uninterruptedly for nearly a century. The present nawab's announcement comes at a time when a few Indian women, aided and abetted by American and European feminists, are attempting to launch a militant woman movement in India.

and enclosed in a simple box, it will have far more attention value and look more attractive than in a blackface box.

If possible, boxes should always be rectangular in shape to conform with the rectangular shape of the newspaper page. Square boxes are out of harmony with the rest of the page and look short and squatty.

Since stories used within boxes or under small boxed heads are usually the out of the ordinary or feature type—oddities in the day's news, bits of human interest—their headlines are almost always set in italic type. The two- or three-part drop-

line in 12- or 14-point italic has come to be considered best for single-column boxes. Such headlines may be enclosed with their stories in the box, separated only by a jim-dash, or the headline alone may be boxed, as shown on page 275.

There is, however, no rule that boxed headings must be italic. They are frequently seen in Roman type, as on the opposite page.

Since the purpose of the boxed feature is to offer a definite contrast to the rest of the type matter, there is no reason why a different headline arrangement from that customarily used should not be employed. A two- or three-line pyramid would be equally, if not more, effective. A few papers have been experimenting with novel type arrangements for their boxed headings, some of which are illustrated on the next page.

### CUTS

While the use of illustrations and a more detailed discussion of printing plates will be taken up in a later chapter, these "cuts," as they are known in newspaper and printing vernacular, must be considered here as important elements in make-up. Pictures, better than any other device, give life and attractiveness to a newspaper page.

Cuts may be any size from 8-column strips or layouts to two-thirds, one-half, or even one-third column widths, the latter being used in the body of a story. Many papers use a three-column cartoon daily on their front pages. Others place their cartoon on the editorial page and use news pictures on the first page. These news pictures may be in the form of a two- or three-column layout or several one-column cuts.

While no hard and fast rules can be laid down, certain practices have been worked out by make-up editors as being most effective for newspaper make-up. In handling cuts, it should be remembered that they must fit into the general scheme of having the whole page suspended from the top, with the heavier masses placed right under the nameplate. Cuts and layouts of more than one column therefore are always placed at the top of the page, never below the fold. If only one or two single-column cuts are used on a page, they, too, demand positions at the top of the page. This is because they represent heavier masses of

# POLICEMAN SETS SCHEDULE FOR MORNING RADIO MUSIC

Burrage-Street Resident Who Likes to Sleep Rather Late Obtains Assistance of Patrolman in Argument With Neighbor.

## *Golf—*

Perfect Timing Reason for Long Driving, Finlay Version

## *No Name*

He's Just 'Mister'

BY LEASED WIRE TO THE JOURNAL

SOUTH BERWICK, Me.—Miss Ruth Esther Ueterson, 30, of Fryburg, Me., and "Mister" Tifft,

## *No Bars to Food*

County Will Feed 1,025—Rather Well

NOVEL TYPE ARRANGEMENTS USED BY SOME PAPERS FOR BOXED FEATURE HEADLINES

color, which, placed lower down, would make the bottom of the page heavier than the top.

If, however, the top of the page has a two- or three-column cut on one side and perhaps a one- or two-column cut on the other, it is then possible to use one or two smaller cuts at the bottom. The only requirement is that the cut masses at the top be heavier than those below the fold. If a six-column cut or layout is used at the top of the page, there is no reason, if space permits and without crowding the page too much, why one or two fairly good sized cuts could not be used below.

Several syndicates are providing single-column "comics" that are light in tone because they are line drawings. Newspapers find that they can use these very effectively to brighten up the bottom of the page, because they are not heavy enough to throw the page out of balance.

Thirty years ago, common newspaper practice dictated that cuts should be sunk down in the story as near as possible to the subject matter to which they referred. This practice is still followed on many European papers. Because of the increase of advertising in American papers, it became difficult to sink cuts on most of the inside pages, and this practice was abandoned. The present plan of balancing cuts according to weights and masses has made for a great improvement in newspaper make-up over that of the nineties.

### HOW TO PLACE CUTS

Today the cut is customarily placed on either side or immediately above the story to which it refers. Sometimes it is possible to tie illustration and story together by running a boxed heading or spread head of several columns over both picture and story, as in the example on the next page.

So far as possible, cuts are not placed in outside columns next to the wide white margins. They look better if framed with type on either side. Since most advertisements contain rather wide margins of white space, it has also become the rule not to place cuts next to advertisements, but to separate them by at least a column of type matter.

Unless cuts deal with the same news story and can be used together to form a layout, they should never be used side by side, for they cancel each other's effectiveness and are confusing

to the reader. If a small one-half or one-third column inset cut is used in an outside column, it is placed on the inside of that column so that there is a frame of at least a few ems of type matter between it and the white margin.

These small inset cuts are very convenient. They help to brighten up a page and may be used in almost any position. Their small size permits them to be used anywhere, below the fold or above. Too many of them, however, make a page look spotty.

## *Chicago Journal of Commerce Sees Frank as U. S. President*

### Would Play Wilson Role In New Manner, Editorial Says

A prediction that Pres. Glenn Frank might play in a new manner the role of Woodrow Wilson and be the second university president chosen as president of the United States was voiced in an editorial printed in the Chicago Journal of Commerce on Dec. 31.

Following Pres. Frank's address in Chicago to the American Political Science association, the paper commented editorially:

**Frank Inoffensively Liberal**

"Pres. Frank of the University of Wisconsin is master of a technique of expressing a general spirit of 'liberalism' without offending business men. It is a technique that permits Pres. Frank to speak often on public affairs without embroiling himself with either of the two strong political elements in his state.

"If, within the next decade or two, the political pendulum of the nation should swing away from conservatism, it is not impossible that Glenn Frank may play in a new manner the role of Woodrow Wilson—the university president elected to the presidency of the country.

**Keeping Himself Available**

"It is not probable, but it is not an outlandish conjecture. Pres. Frank, to use the politician's term, is keeping himself available.

Glenn Frank

"The message which he expresses is like Wilson's in that it breathes a 'forwardlooking' spirit, but, unlike Wilson's, it does not emphasize the Jeffersonian tradition of the rights of the plain people, nor indicate hostility to big business. This is a new age, which takes little stock in the initiative and referendum and has accepted the bigness of business as necessary

**Has Gift of Expression**

"Living in the new age, with his mind attuned to the newer developments in American life, and his ear not far from the ground, Pres. Frank expresses himself in a manner that is rather new, or at least seems so to the ordinary listener. If what he says is commonplace to political scientists, it is nevertheless a novelty to most other people. Therefore he is having little difficulty in winning a reputation as a prophet of an age to come."

At the time of Albert E. Wiggam's recent visit to the university, The Capital Times printed an interview with him on the same subject. Mr. Wiggam praised Pres. Frank's able guidance of the University of Wisconsin and declared that such ability was much to be desired in a president of the United States.

"He may not be one of the greatest men," said Mr. Wiggam, "—the greatest men are not elected as president—but he has that necessary personality."

The first "Frank-for-President" article appeared in The Nation, liberal weekly, about a year ago.

### Badger U. Prexy Would Be Second College Head To Lead U. S.

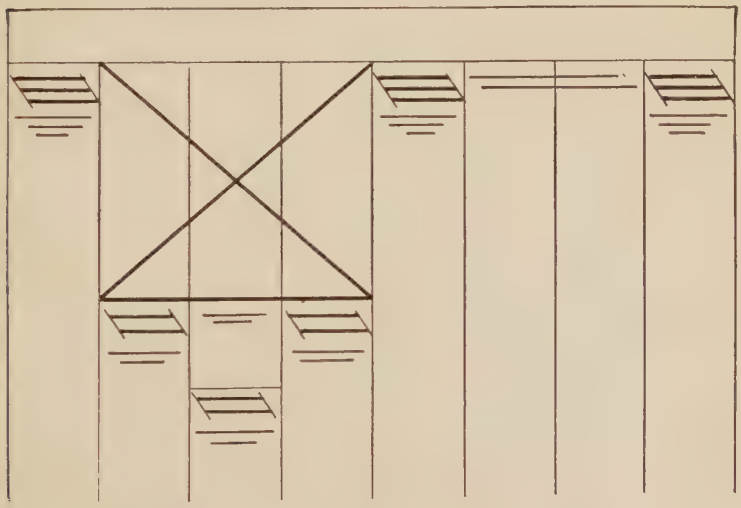
In placing pictures on inside pages, the custom is to use the larger layouts on the odd numbered pages, to which the eye travels first, and the smaller cuts on the even numbered or left-hand pages. In an attempt to lead the reader back into the newspaper, a number of papers make it a custom to have a good news picture layout every day on page 3 and often on pages 2 and 5. Because of the limited triangular space left above the advertising on most inside pages, the best location for a single-column cut is ordinarily at the top of column 2; if the

cut is double-column, it will find its best location at the top of columns 2 and 3.

Careful make-up editors also keep in mind the fact that each pair of facing pages must be viewed together, and so attempt to get a certain balance in the placing of their cuts and headlines on left-hand and right-hand pages. By treating the pages as a unit, a more pleasing effect can be obtained as they lie open side by side.

In Sunday feature sections in which the whole page may be devoted to a single article, greater freedom is permitted. Cuts may be placed in almost any position and the story run around them. Sometimes they can be arranged diagonally from top to bottom. Whatever plan of grouping is selected, the editor tries to get a pleasing feeling of balance into his page from left to right, and with the heaviest masses above the fold.

Cuts are among the most effective make-up devices that the editor has. Not only do they brighten up and lend interest to his pages, but they are very convenient devices to place between top heads to prevent tombstones. Furthermore, they provide convenient points under which to start new stories or to turn up dead ends of type. If two or three columns wide, their bases make an ideal place to hang a two- or three-column head, or a staggered layout of three single-column heads with a little "short" or feature story in the center.



### CUTLINES

Practice varies widely among papers in regard to cutlines. Some use a two- or three-word overline set in a box above the cut, with explanatory underlines beneath the cut. Others bring the cut to the top of the column and use only a small heading centered under the cut, with explanatory underlines below. Still others box both head and explanatory lines above the cut.

Overlines are usually set in 18- or 24-point type, depending on the size of the cut or layout below. The underlines are most often set in the regular body type, but are double leaded and indented one-half em on each side in order to make them stand out from the text matter. A number of papers set both overlines and underlines in italic; a few use boldface.

When small inset cuts of less than column width are used, the cutline is ordinarily confined to a single line which gives the name of the person shown, and to differentiate it from the body type adjoining it may be set in italic, boldface, or caps and small caps.

### SPECIFYING TYPE

A complete explanation of the system of directions worked out between copy desk and composing room in carrying out the make-up of newspaper pages will be given in a later chapter, but it may be well to discuss here the methods of specifying any of the special typing arrangements enumerated in this chapter. Any deviation from the regular headline schedule or office system must be carefully specified by the copyreader so that the printer will understand exactly how the matter is to be set.

It is customary to place all directions to the printer in a circle or inside brackets to avoid any confusion with the text.

In specifying type, the name of the face desired, the style, and the size all should be included, also the width of line, if there is any deviation from the regular column width. Thus, if the copyreader wishes to call for a special cutline to be mortised into a space left for it in a feature page layout, he might specify

(8-point Cheltenham O. S. Medium
set 18 ems double leaded)

If the change involves no change in type face but merely one of size and measure, the directions need not be as complete. Thus,

## *Sings in 'Lakme'*

Irene Pavloska, contralto of the the Chicago civic opera company, has many friends in Milwaukee who will hear her famous duet with the soprano in "Lakme" next Friday night at the Auditorium. This is one of the high spots in that opera, which registered a distinct success when it was revived in Chicago last week.

## Climbs to Fame

(International Newsreel.)
**Lady Mary Heath, British aviatrix, who set an altitude record for women in a flight at Curtiss field, N. Y., yesterday.**

## Edward W. MacDuff

**Pawtucket Business Man Dies Suddenly While On Duck Shooting Trip, Near Plymouth.**

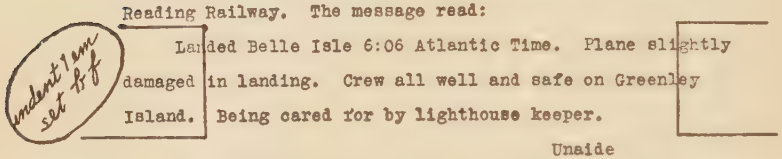
THESE EXAMPLES ILLUSTRATE THE THREE CUT LINE ARRANGEMENTS MOST COMMONLY USED BY AMERICAN NEWSPAPERS

if the editor, for instance, wishes to set the lead of an important story in a large size and over two columns, he specifies:

(10-point double measure)

The printer then merely uses the regular body type face of the larger size specified.

For matter that is to be boxed, a frame is drawn all the way around it. To mark an indention, a bracket is drawn through the matter on each side, and the directions to the printer are written inside the bracket, as illustrated below:


A wireless message addressed to the London Times and believed to have been sent by one of those aboard the German plane, Bremen, stating that a safe landing had been made on Belle Isle was picked up tonight by an operator of the Reading Railway. The message read:
Landed Belle Isle 6:06 Atlantic Time. Plane slightly damaged in landing. Crew all well and safe on Greenley Island. Being cared for by lighthouse keeper.
Unaide
The Reading operator was unable to decipher the signature of the message.
indent 1 em set ff

In specifying type, the letters *bf* are used for boldface, *Rom* for Roman, *caps* for capitals, *sm.c.* for small caps, and *u & lc* for upper and lower case.

When type matter is to be leaded, a vertical line drawn through the lead paragraph, for instance, means that this is to be opened up with two point leads. Two vertical lines would indicate double leading, or these directions could be written in the left hand margin in a circle, as *lead* or *double lead*.

In designating heads that are out of the ordinary, care must be taken to specify not only the type face and size desired but also the position. Thus, for the novel feature story arrangement on page 272, the heading would be specified thus: "14-point Italic *u & lc* set flush to left," while the specifications for the story, which is set in regular body type, would be merely: "Indent to right two ems, set flush to right."

If the heading were an out of the ordinary caption for a Sunday picture layout, it might be designated as "Set 12-point Bodoni Italic centered below cut."

There must be nothing left to guesswork. Every direction must be made so clear that there will be no misunderstanding and so that the printer can carry out his orders without delay. To get proper coöperation from the composing room, the editor needs to know not only the printer's language but also the possibilities and limitations of the equipment in his composing room. To the editor who knows how to work with type, however, there are untold possibilities for the creation of interesting pages.

### SUGGESTIONS FOR THE STUDENT

1. Make comparative criticisms of the type devices used to brighten up different newspapers that you read.
2. Analyze the editorial page of your local newspaper and suggest type devices that might be used to make it look more interesting.
3. Search newspapers for examples of each of the devices discussed in this chapter.
4. Study the make-up of a particular newspaper, noting the type devices that are used, and suggest others which might be employed to advantage.
5. Practice working out type specifications for devices that evidently are not included in the regular headline schedules of papers that you study.

## CHAPTER X

### NEWSPAPER MAKE-UP

WITH an understanding of the typographic devices at his command, the student or editor is now ready to proceed with a study of how these elements are to be combined into interesting newspaper pages.

These devices, of course, must be considered in their relation to the news that they help to display. They are, after all, only the typographic tubes of color with which the editor paints his picture of the day's happenings.

There is as much art in the work of a newspaper editor as there is in the creative effort of a painter. The latter has his tubes of red, yellow, blue, and green. He mixes his colors and puts them on his canvas in combinations that create a beautiful landscape. The news editor has his stories, long ones and short ones—bits of human drama, with here a tragedy, there a bit of comedy, here a history-making event. He has his type, his headlines, his boxes, rules, pictures, and cartoons—with all this raw material he creates a picture of that day's cross section of life, a picture that is more vivid, pulsing, and real than any picture of paint and canvas.

Making up newspaper pages is one of the most important steps in the production of a newspaper. It is quite as important as news gathering and news editing. In fact, the writing and editing of a story, even the writing of a headline to advertise the story, is of little avail unless that headline and story are displayed on the newspaper page in such a manner that they can be easily seen and read. The arrangement of these headlines, type masses, cuts, boxes, and other typographic devices determines the whole physical appearance of a paper. Yet, until a few years ago the whole problem of make-up on many papers was left to the printers in the composing room. The copy desk sent down stories and headlines, and the printers threw this material into pages in the quickest time possible.

But news editors today, because of competition, have been compelled to give increasing attention to make-up and to strive by interesting arrangement to give their pages life and variety in order to catch and hold the attention of readers. Some papers, it is true, pay attention only to the make-up of their front pages and, while furnishing a carefully worked out "dummy" for their "show window," let the printer throw the news together on the inside pages wherever it fits best. On other papers, however, not only the advertising staff, but the news staff, as well, furnishes the make-up man in the composing room with a dummy for every inside page, so that the whole paper is planned for the most effective display of both news and advertising.

The work of building type pages is in the hands of one or more printers called "floormen" or "make-up men" working under the direction of the news editor or city editor, or often a special make-up editor. The rush and thrill of getting the page forms to press in time for successive editions makes the make-up editor's job one of the most interesting on the paper. Then, too, there is something creative in building type pages, which the rest of the staff misses entirely.

### THE DEVELOPMENT OF AMERICAN NEWSPAPER MAKE-UP

The average reader seldom thinks of make-up as such. Yet, unconsciously the make-up of the newspapers he reads exerts an influence upon him. There are some papers whose attractively arranged pages are like an open door, inviting the reader to come in and browse. There are many others so disorderly that they repel by their very appearance. Unconsciously the reader judges the quality of both news and editorial matter by the make-up. Careless make-up cannot help but make many readers feel that perhaps the paper is just as careless and inaccurate in its news gathering. Certainly such make-up does not inspire confidence in the editorial opinion of the paper, nor does it inspire the confidence of advertisers who give a great deal of study to the layout of their own advertisements. A disorderly looking paper does not have as high attention value for the advertisements it carries.

The make-up of American newspapers has gone through a long process of development and it is still changing. Make-up

editors are working out new ideas every year. Ideas that are good practice today may be absolutely worthless tomorrow. The larger changes in the past century have been closely related to improvements in the composing and press rooms. Composing machines, modern presses, and stereotyping equipment, to a great extent are responsible for the present size and form of the American newspaper. Were it not for these mechanical improvements we might still be reading four- and eight-page newspapers.

The first paper in America, the *Boston News Letter,* which made its appearance in 1704, was only a small pamphlet measuring approximately 6½ inches wide by 10½ inches high. It was a single sheet printed on both sides, and each page had but two columns. It was printed in small type and had no display whatever. Such headings as appeared were tiny cross-lines, usually in italic, looking even smaller than our present subheads. Other early colonial papers were all of this form. Mechanical limitations and small subscription and advertising patronage made it impossible to get out larger papers. Paper and ink were scarce and expensive. Only one sheet at a time could be printed on the small hand presses. Then when the sheet had dried sufficiently it was turned over and printed on the other side. Only 125 sheets printed on both sides could be run off in an hour.[1]

After the Revolutionary War, however, newspaper publishing was given a fresh impetus by the revival of trade and an increase in advertising. Printing materials were less difficult to obtain, and improvements in presses made possible the printing of larger papers and more frequent editions. Weekly papers changed to bi-weekly, tri-weekly, and finally to daily papers. The first daily in the United States appeared at Philadelphia in 1784 when the *Pennsylvania Packet and General Advertiser* became the *Pennsylvania Packet and Daily Advertiser.*[2] Noah Webster's *American Mercury,* typical of the dailies of the post-Revolutionary period, had a 9 by 15 inch page with four columns only a trifle wider than present newspaper columns.[3] It carried very small headlines at the top of long columns of fine print and had advertisements on the front page.

[1] Willard G. Bleyer, *History of American Journalism,* p. 71.
[2] *Ibid.,* p. 101.
[3] *Ibid.,* p. 113.

### HOW ADVERTISING EXPANDED THE NEWSPAPERS

As time went on, papers increased the size of their pages to accommodate more advertising and news. The two outside pages, 1 and 4, were devoted almost entirely to advertising except for some miscellaneous reprint for "filler." That custom arose out of the fact that pages 1 and 4 were printed first, and since the sheet had to be turned to print pages 2 and 3, the outside pages were often somewhat blurred. The editor, therefore, reserved the inside of the folio for his editorials and important news.

The New York papers in particular attracted a great deal of advertising and often had to get out inserts of two pages or even second folios to make eight pages. Pages grew to accommodate seven columns. Then, as the capacity of the presses permitted, the columns were lengthened and widened until newspapers grew into "blanket sheets" 30 inches and more in length and 24 inches in width.

The birth of the penny paper in 1833 brought back the smaller sized page. Benjamin Day's first issues of the *New York Sun* were little four-page folders with pages measuring 7⅝ by 10½ inches and containing three columns each. But the penny papers proved so popular that they, too, had to increase their size to accommodate the advertising that came to them. In two years the *Sun's* pages had grown to 14 by 20 inches. They were, however, still of tabloid size compared to the large unwieldy blanket papers, and part of their popularity was due to the ease with which they could be handled and the convenience with which they could be carried about and read at leisure.[4]

### BIRTH OF THE "SHOW WINDOW"

The Civil War wrought great changes in the American newspaper. The demand for news not only caused the invention of the modern American action headline and summary lead, but it converted the front page from a mere cover to a news page. Advertisements were crowded off by the press of big news, and the whole front page was opened up by half columns of cross-line heads over important stories.

[4] *Ibid.*, p. 164.

After the war, pages were lengthened and the opening up process continued, though more slowly. Pages began to look newsier and less crowded. Pyramid heads came in to supplement the cross-lines, but no heads were set in type larger than 18-point. To our eyes the front page of this period is still very dull and gray.

But headlines gradually grew in size, and the long columns were broken up with frequent subheads. Column widths went through a period of experimentation in which they varied all the way from 10 ems to 20 ems and back again. Then for many years the 20-inch page of five or six columns was standard. Contrary to present-day practice, the most important story of the day was usually placed in column 1 at the left-hand side of the page, or it might be placed in column 7 and turned up as a dead end in column 8, which today ranks as most important.

### THE BEGINNING OF HORIZONTAL DISPLAY

All this time, newspapers were held to vertical display. Only single-column heads were possible because of the mechanical limitations of the type revolving press. It was not until the early nineties that horizontal display came in and headlines spread over two or three columns. Front page display was carried to sensational lengths by the *New York World* and the *Journal*, with full pages of banner headlines and spread heads in screaming blackface type.

Many papers by this time had adopted the 21-inch page of seven 13-em columns, and for nearly two decades this page held sway. Then some enterprising editor discovered that if he cut down each column to 12½ ems and narrowed his outside margins a trifle he could get eight columns on the page and thus increase the amount of advertising revenue that could be obtained from each page and at the same time effect a marked saving in paper and space. Today the 8-column page is standard with most metropolitan papers, though many small city papers and rural weeklies use only six or seven columns.

The more recent development of front page display has been explained in Chapter VIII. The make-up of the American newspaper has gone through many changes and it is not yet standardized. Modern composing machines, rotary presses, and stereo-

typing equipment, on the one hand, and the tremendous increase in advertising, on the other, have made possible the present-day newspaper with its many pages and its hundreds of thousands in circulation. But this modern-day newspaper has brought with it new and complicated problems of make-up. One need only glance through the files of some of the great newspapers of the nineties to become convinced that our present-day newspaper is much more interesting and attractive looking, much fairer, and a better, cleaner paper all around than that of the former generation. But there is still much room for betterment, and in that process of improvement the make-up editor is going to have a large part.

### MAKE-UP AS AN EDITORIAL PROBLEM

In the next chapter the mechanical aspects of make-up will be discussed, because it is necessary that the editor understand the mechanical problems involved in fitting type masses together to build pages. The real planning of these pages, however, takes place at the editor's desk when he prepares his dummy for the make-up man.

Make-up is an editorial as well as a typographic problem, which involves a careful study of the appearance of the paper and the impression it will make upon its readers through every page and department. While the task of the make-up man in the composing room in getting stories to fit in the type page is difficult enough, the real problem is one of creating an attractive and interesting display of the news and a fair play of that news. The editor who knows how to use the typographic devices at his command will be able to turn out the most interesting and pleasing newspaper.

### FOUR TYPES OF NEWSPAPER PERSONALITIES

In using these type devices, the editor must strive to make them express the personality of his paper. That personality depends on the editorial policies of the publishers and the manner in which they have analyzed the popular psychology of their readers. There are some papers, such as the *New York Times*, that aim merely to present a sane straightforward story of the day's news—"all the news that's fit to print." Their appeal is

not to the excitement-loving masses, but rather to a more conservative class of well informed people who desire to learn all that they can about what is happening in the news every day. The type dress of the *Times* expresses the personality of a capable, businesslike news merchant, going soberly and efficiently about its business of selling more news than any other paper in the country.

There are others, such as the *Chicago Tribune* or the *Detroit News* that appeal to a more varied audience, an audience that wants not only a good, complete story of the day's news, but also a bit of entertainment—a little more human interest woven in with the straight news, pictures, comics, popular features. The typography of such a paper will naturally express more liveliness, will have more contrast between headlines and body type, a bit more originality in make-up, than the conservative, gray-toned papers.

Still a third group, represented by such papers as the *New York Telegram* and others of the Scripps Howard chain, are not content alone with selling news and entertainment, but determinedly set out to arouse their reading public to action against whatever evils or abuses they may be fighting. The typography of such a paper must be expressed in the bold, telling strokes of the crusader.

And then there is that fourth group that makes its appeal only to the masses and frankly sells itself as an entertainer, even in its presentation of news. It gives its readers a vicarious thrill in its sensational play of stories of crime and scandal.

Dean Eric W. Allen of the University of Oregon has aptly described the news policy of this type of newspaper when he says:

> Its "best" news is the story that contains surprise or drama or arouses the emotions. It is the only kind of news that has great appeal to the thoughtless, the property-less, or those not oppressed by responsibilities. Its value is a plot value; it is a true event that would still be readable if it were fiction. Therefore the sensational make-up is planned to bring out fiction values: emotions, suspense, surprise, character reactions, horror, hate, suspicion, gloating in victory, hero worship, contempt. Among the most effective of these sensational values are satisfaction of thwarted sexual curiosities and flattery of the reader.[5]

[5] Eric W. Allen, *Printing for the Journalist*, p. 102.

What space is not taken up with this type of news is crowded with pictures in keeping with such news, and with entertainment features of every kind. It is the circus clown in his cap and bells, and as such it adopts the circus barker type of make-up—emphasis in big black capital letters in as many places as it can crowd into the page, screaming black banners and spread heads, a great variety of boxes with heavy borders—inviting its public to come in and view its latest collection of morons, freaks, and monstrosities. It is the type of make-up adapted exclusively to street sales.

There are, of course, many gradations in this sensational style of make-up. In the extreme circus style, it usually violates all principles of typographic balance and harmony, but in the hands of a skilled make-up editor, forms of sensational display can be used to produce pages that, by their very originality and emphasis, are extremely effective while observing most of the canons of good typography.

Whatever may be the personality of the paper, it is the duty of the editors in charge of make-up to translate that personality into type forms. That does not mean that the paper will look exactly the same every day. There should be many different ways of expressing the same idea, and the skillful make-up editor tries to vary the appearance of his paper every day while still making it conform to certain ideals of arrangement and display which express the kind of newspaper his executives are trying to put out.

### PLANNING THE PAPER

Any one of several news executives may be charged with the planning of the make-up. On smaller dailies this work may be part of the duties of the city editor or the telegraph editor. On larger papers it is frequently placed in the hands of the news editor.

While many editors go to the composing room with a bundle of proofs and direct the make-up from a mental picture of the page that they have worked out as the news has been sent down, there is a growing tendency to dummy at least the first page in order to get the best make-up possible.

Through the day, as story after story has been sent down to the composing room, the news editors have kept a careful

NEWS ROOM, MILWAUKEE JOURNAL

record or "schedule" of the stories handled. This schedule usually shows the name of the story, the headline called for, the copyreader who handled the story, and the time it was sent down. As galley proofs come back from the composing room, the editor fills in on his schedule the column length of each of the major stories so that he can estimate how much room they will take on the page. To make sure that important stories meriting front page space will not be tucked away on inside pages, the editor may send such proofs back slugged "Page 1," or he may mark the story thus when the copy first goes to the composing room.

On larger papers having a telegraph editor, cable editor, and city editor, each usually keeps a schedule of the stories that go over his desk. About ten or fifteen minutes before the edition deadline, the news editor, who correlates the work of all desks, calls the three other news executives into an informal conference to talk over the major stories of the day and to decide how they shall be played. Each editor submits his "best" stories, and together they quickly decide the relative prominence to be given to each. Then the news editor, who has previously made a rough diagram of his page, assigns the headline he desires for each of the major stories. The desk executives pass these instructions on to the copyreaders who have handled the stories. Usually the major stories, which it is expected will make front page, have been sent down "head to come"—marked "HTK"—to await the news editor's decision as to their headline. As soon as these instructions have been received, the copyreaders race to get these heads down before the deadline.

### PREPARING THE DUMMY

The news editor rapidly completes his diagram of the front page. He is provided with 8 by 11 inch sheets ruled to represent the blank columns of the page. On this diagram he proceeds to lay out the news matter and pictures he has to display. If the make-up that he has in mind calls for a banner headline, he draws a line across the top and writes above it the guideline or name of the story and the number in the head schedule that designates the size and style of type he wants. In the columns below he first places the cartoon or pictures he has to display

by outlining the space they will occupy and then drawing a cross over this space to indicate "pix," as all art work is called on many papers. Inside the space he writes the dimension of the cut and a guideline or brief description, so that the right cut will be sure to go in the place indicated.

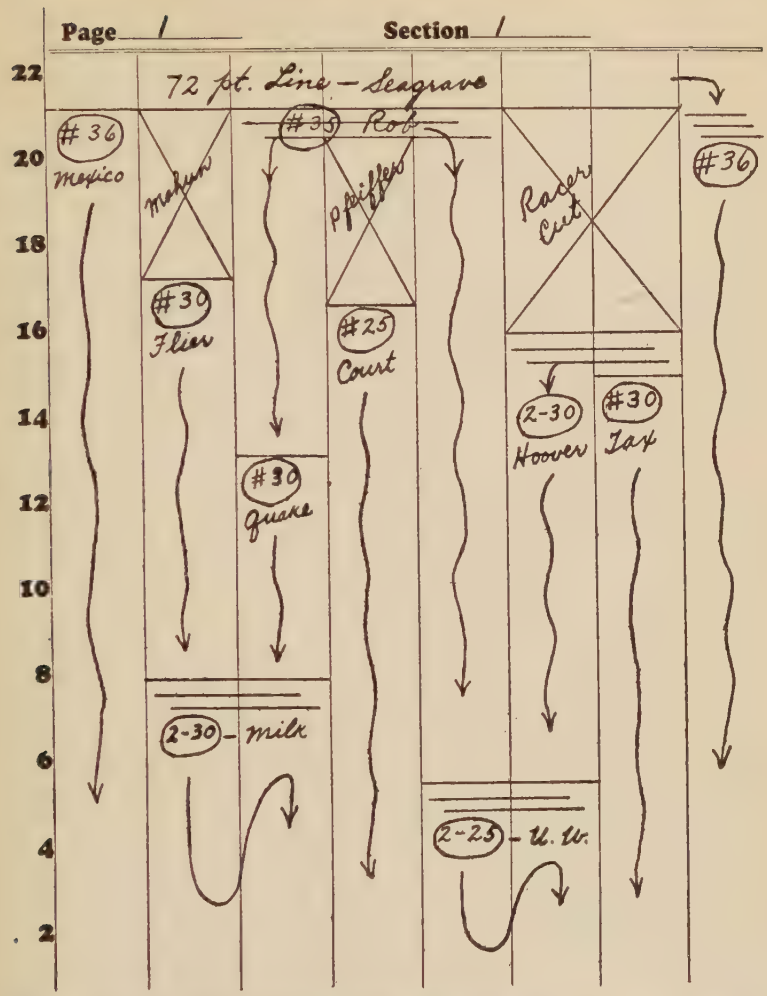
With the art work placed, he then fills in the rest of the page with his major stories, marking the number of the headline desired and the story to go in each position. To indicate a box between two major stories, he draws a rectangular frame and within it specifies the headline and story. From his galley proofs and his schedule he can tell how long each story will run and, since his dummy sheet is laid out to scale, he can easily draw in cutoff lines to mark the bottom of each story. Then it is an easy matter to indicate shorter stories to fill out the columns. Many editors, however, do not completely dummy the front page, but lay out only the top of the page and indicate any other shorter "must" stories that they particularly want on the front page. The rest of the page is left to the make-up editor in order to give him all the leeway possible in making his columns come out right.

When his dummy is complete, the news editor may take it to the composing room himself and direct the building of the type page from this diagram, or, if the paper has a special make-up editor, the dummy is sent down the pneumatic tube to the latter's desk, and he directs the make-up as will be described in the next chapter.

On a few larger papers it is becoming the practice to completely dummy every page in the editorial room. Every detail is carefully calculated and laid out on each page dummy. It then is unnecessary for any member of the editorial staff to go to the composing room, for the printers in charge of make-up can follow the dummies sent down.

### INSIDE PAGE DUMMIES

With the inside pages the procedure is a bit different, since these pages contain advertising. Duplicate dummies are first prepared by the advertising department. On larger papers this work is in the hands of the "ad-dispatcher," who lays out the advertising to go on each page. One copy, on which is clearly




THE NEWS EDITOR'S DUMMY FROM WHICH MAKE-UP MEN BUILD UP THE TYPE PAGE

marked the position of each advertisement, the size of the space, and the name of the firm, goes to the composing room. The second copy, on which is marked only the space taken up by the advertising, goes to the news or make-up editor. The space above the advertising is for the editorial staff to fill up with news and pictures. Special department pages are sent to the department editors to be dummied. All other inside pages are filled out by

the make-up editor, who schedules stories and pictures in these columns from all the matter not reserved for page 1.

### GOVERNING FACTORS IN FRONT PAGE MAKE-UP

The front page, of course, is the most important one from the standpoint of make-up, for it is the show window of the newspaper. Its general appearance will be determined first of all by the style of headline display and typographic tone that has been adopted by the paper as best expressing its personality. When the editor sits down to plan his page, he has in mind certain ideals of arrangement and display which express his paper.

Aside from the headlines, however, there are certain other factors that he must bear in mind—the policy of his paper in regard to the number and length of stories used, breakovers, and pictures. They have a good deal to do with the appearance of his page.

### STORY POLICY

There are some papers, such as the *New York Times* and the *Chicago Tribune,* that make it a policy to use only a few long stories on the front page. They insist that readers would rather have a few good stories treated adequately than to learn only a smattering about a great many stories. Such a policy makes for a distinctive make-up, since the front page will contain comparatively few headlines. On a contrast-tone paper, such as the *Chicago Tribune,* that policy will make these few headlines stand out with greater prominence. The make-up of such a page is difficult, for the arrangement of a few long stories is far less elastic than that of a large number of short ones. Furthermore, the selection of these few stories for front page display becomes a matter of great importance, since the prominence given to them inevitably attaches a greater news value to each story than is the case when a large number of stories are used on the page.

There are many other papers, such as the *New York Herald Tribune,* the *New York World,* and the *Springfield Republican,* that use a great many stories on the front page in the belief that their show window will attract more readers if it presents

enough stories to appeal to a wider range of readers, also that most people prefer reading a little about many different subjects. This policy crowds a large variety of interesting material on the front page and enables it to present a broader picture of the day's news. It also makes the reader feel that he is getting more for his money. This plan makes for many headlines on the front page and gives the make-up editor a greater opportunity to play with his typographic elements to achieve interesting effects and attractive pages. A many-story page is likely to have more sparkle and life to it than the other, but at the same time it takes careful planning to keep it from looking like a hodge-podge.

### BREAK-OVERS

The subject of the length of stories used on the front page brings up also the question of "break-overs" or "jumps." Papers with long stories can usually complete them on the front page. Many of the more serious papers that use the many-story page make-up, wishing to give an adequate treatment to all important stories, start a large number of stories on the front page and break them over to the inside. The use of break-overs has a great advantage from the standpoint of the advertiser, since it inevitably leads the readers back into the paper to the advertising. Some papers, however, overdo this jumping of stories and make it annoying to the reader who finds that he must turn back into the paper to find the end of most of the stories that he starts to read.

To make it easier for the reader, it is a good plan to place all of the break-overs, so far as possible, on one inside page. This also makes the problem of make-up simpler, for, when changes occur on the front page, only this one inside page has to be made over. Usually one of the left-hand pages, such as 2, 4, or 6, is reserved as the break-over page. Since stories are frequently crowded off of page 1 from edition to edition, it is convenient to have a make-over page on the inside to which such stories can be moved. On papers using many stories on the front page, it is more than ever important that the inverted pyramid story form be followed closely, for only break-overs of worthwhile length are jumped inside. If there remains only a final paragraph or two, or a few lines for which there is not

room on the front page, they are merely dropped, for such short break-overs would be lost on the inside and are not worth the extra trouble of fixing up a jump. Some papers have a rule that no break-over of less than four inches shall be used. Break-overs demand a special type of head, which has been explained in the chapter on headline forms.

### FRONT PAGE CUTS

The general problems of make-up involved in the use of cuts have been discussed in the previous chapter. Papers vary widely in their use of front page illustrations. A few, such as the *New York Times,* the *Kansas City Star,* and the *Boston Transcript,* use no pictures on the front page. Most papers, however, find that a good illustration or two on their first page is a splendid means of brightening up their show window and of making it sell more papers.

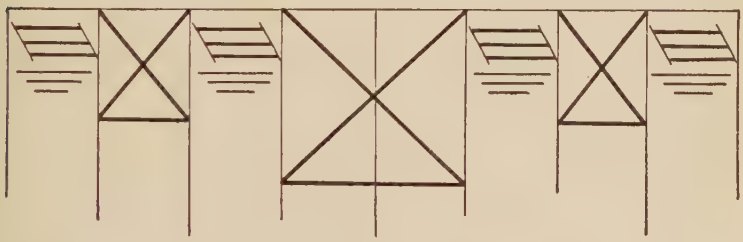
The three-column cartoon is popular. It provides a good, big, eye-arresting spot and makes a convenient framework around which to build a layout of heads. While always occupying a top of page position, it can be shifted from side to side to gain variety in make-up. To get a feeling of balance in the page, the cartoon, when used alone, must be kept toward the inside. It is not usually permitted to break into columns 2 or 7 in an eight-column paper. But it can be shifted from left to right by using columns 3, 4, and 5 one day, and 4, 5, and 6 the next. In a seven-column paper, a three-column cartoon or cut used alone should be centered in columns 3, 4, and 5. When used with a smaller single-column cut, the cartoon can be permitted to break into the next to the outside columns, for the smaller cut can be placed so that it will balance the extra weight on the other side.

Many papers have moved the daily political cartoon inside to the editorial page in the belief that good news pictures, particularly local ones, have better attention value and selling power than the cartoon. For an illustration of a news event the larger cut of two, three, or four columns is best because it can present the subject in more interesting and adequate detail, but for the picture of an individual, one-column cuts are ordinarily sufficient.

The placing of news pictures is very important, since the rest of the make-up is built around the cuts. There are infinite possibilities in their arrangement, and it is almost impossible to lay down any rules. The type of make-up used and the editor's own sense of fitness and balance in most cases will have to be the determining factors.

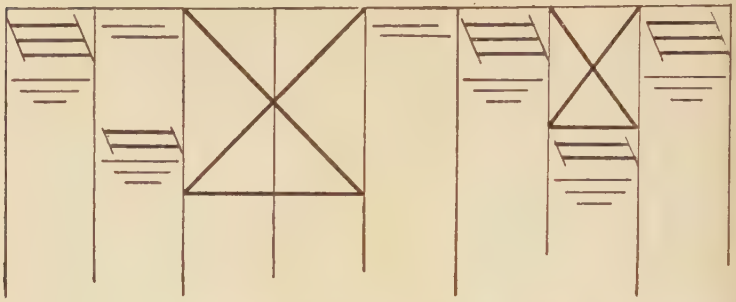
Some papers use a single large cut or layout on the front page every day. Unless it has unusual news value, such a cut is kept to three or four columns at most, lest it take up too much valuable news space. Its placing will conform quite closely to that of the three-column cartoon, as explained above. Since the heaviest headline display is usually in the upper right-hand corner of the page, a three-column news picture probably is best placed to the left-hand side, preferably at the top of columns 3, 4, and 5, in order to get any feeling of balance into the page. Larger layouts must of necessity be centered as nearly as possible.

The two-column news picture or the combination of a two- and a one-column cut are more popular, since their arrangement is more elastic. In the formally balanced type of make-up, a single two-column cut can be centered nicely in columns 4 and 5 of an eight-column page, and the rest of the layout can be built around it.

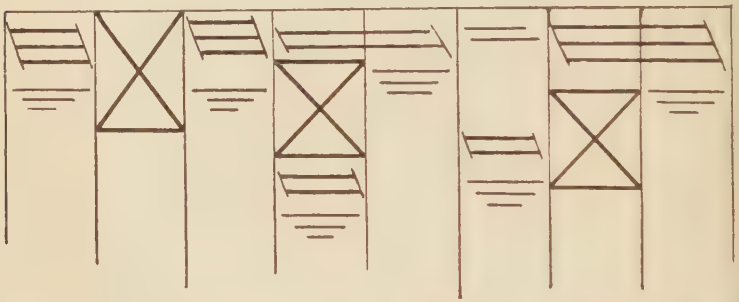


Two single-column cuts or boxes can be used in columns 2 and 7. When a more informal balance is used, the two-column cut may go to either side, depending upon the arrangement of headlines, though it usually is placed to the left because of the weight of headline display to the right.

Used with a one-column cut, a pleasing feeling of balance can be obtained by placing the two-column cut just off-center in columns 3 and 4, with the one-column cut in column 7.



When two or three one-column cuts are used, the make-up editor has a great deal of leeway. Three one-column cuts can be placed in alternate columns across the top of the page to get a nice feeling of formal balance, but if used too often this make-up gives a certain stiffness to the page. Anyone with a feeling of balance, however, can shift such an arrangement many different ways to get symmetry without too much formality. Cuts can often be dropped down into their columns or otherwise juggled about to get variety.



When a single one-column cut is used, it is usually placed on the left to balance the major headline display on the right, unless it is related to the main story; then it is placed in columns 6 or 7.

The use of small one-half and one-third column inset cuts that can be placed anywhere in the page is becoming increasingly popular.

### POSITION RANK

Another factor that must be considered before going on to the actual planning of the page is that of the relative importance of various positions on the page.

The top of column 8, the outside right-hand column, is the most important position, for it is the spot to which the eye travels first; furthermore, it is set off by the white space of the margin next to it and it is the turn column, which enables the story in this position to be carried directly over to the first column of the second page.

The top of column 1, the outside left-hand column, is the next in importance on the front page. It, too, is set off by the white space of its adjoining margin. On the inside pages, column 1 is the most important, for we naturally read from left to right.

The other columns are of about equal importance, though many editors have a feeling that columns 6 and 7, being closer to the right side of the page, are next in importance after column 1. Since it is the practice to place major stories only in alternate columns, and to put some short feature story with a light italic head, a box, or a cut between them, it is probable that column 7 in most cases will carry a lighter head, and column 6 therefore will usually rank after column 1. Column 3 is next in order because of its closeness to the other margin. Columns 4 and 5 are of equal importance. To avoid tombstones at the top of the page, these two columns are frequently topped by a two-column cut or feature story.

A good deal depends on how the paper lies on the news stands. When the paper is folded twice, the right-hand upper quarter is the only one that is seen, and columns 5, 6, 7, and 8 therefore are of greatest importance. When the paper is folded only once, however, the outer left-hand column has an importance second only to the outer right-hand column.

### STYLES OF FRONT PAGE MAKE-UP

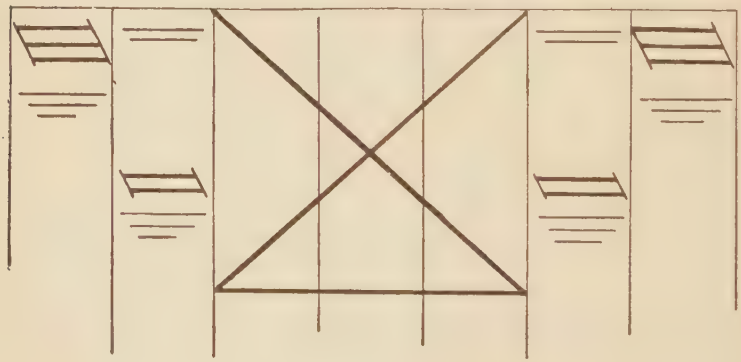
In striving to arrange headlines, cuts, and news matter into interesting pages, newspapers have evolved several different styles of make-up. At first thought one might say that there are as many styles as there are newspapers, but after comparing a number it will be seen that, after all, the many varieties resolve themselves into four general schemes of make-up. A newspaper may use one style on Monday and another style on Tuesday, still keeping to the typographic tone that expresses its personality. There are many variations also that can be played

upon in each one of these styles. No paper wants to look exactly the same from day to day. Yet each newspaper usually keeps pretty close to one general style, not only because it seems best suited to its character, but also to enable readers to identify their paper at a glance.

### BALANCED MAKE-UP

Most conservative papers use what is known as balanced make-up, which strives for absolute symmetry. Headlines, boxes, and cuts are arranged to balance each other. In its simplest form, in seven-column make-up, such a page might be arranged as follows:

Black heads are used in alternate columns, and lighter heads are used between for contrast. The large head in column 1



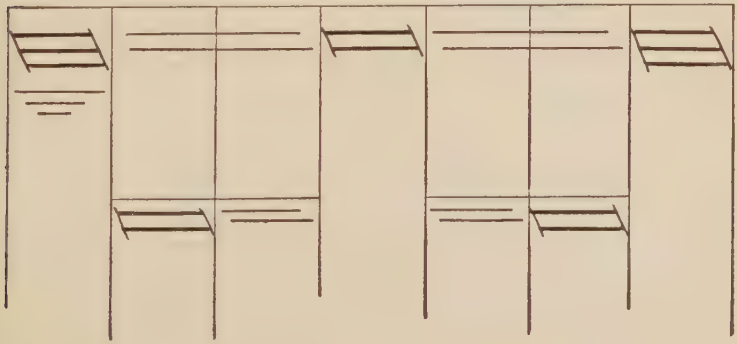
balances the other large head in column 7, and the secondary head in column 3 balances a similar head in column 5. If a cut or box had been used in column 2, it would have to be balanced

by another cut or box in column 6. Other headlines below the top and even below the fold have to be similarly balanced in the strictly balanced page.

While striving for this symmetry, most papers, however, try to get variety into the arrangement of their pages from day to day. The first illustration on the opposite page, for instance, might be varied by centering a three-column cartoon or cut and balancing heads on either side and below, as in the diagram below it.

Such an arrangement gives perfect balance while introducing more life and interest into the page. Another day this plan might be varied by using outside two-column heads, as below:

Still another form of balance is achieved by using two inside two-column heads, as follows:



A similar effect can be attained by using two two-column cuts in the spaces marked for the two-column stories below.

These are the principal variations that can be played upon in seven-column balanced make-up, but an ingenious make-up man will find many ways of getting still further variety even within these four styles of balanced pages.

EIGHT-COLUMN BALANCE

In the page of eight columns, the problem is more difficult, because, of necessity, balanced heads in alternate columns will bring together two like heads in the center, producing a tombstone, which is not desirable because each head tends to kill the other. Even if a two-column story is used in the center, the two heads below it form a tombstone.

Using two two-column heads in columns 2 and 3, and 6 and 7, and then stepping the heads below, produces a pleasing pyramid

"All the News That's Fit to Print."

The New York Times.

THE WEATHER

VOL. LXXVIII.... No. 25,914. NEW YORK, SATURDAY, JANUARY 8, 1927. TWO CENTS IN GREATER NEW YORK. ELSEWHERE THREE CENTS.

SENATORS HECKLE BORAH ON TERMS OF ANTI-WAR PACT

He Notes His Ground Agreed Exposes Lack of Critics Who Delay Treaty Fire.

QUESTIONS IN VOLLEYS

Head of Missouri and Robinson of Indiana Are Most Persistent of Opponents.

SLIGHT TILT WITH BRUCE

By RICHARD V. OULAHAN.

Coolidge Lauds Spending To Cut Rate

STEEL CORPORATION TO GET $26,000,000 IN 1917 TAX REFUND

Garner Leads Democrats in Van Convention Fight Against Treasury Settlements.

$75,000,000 TOTAL VOTED

Republicans Put Rebate Item Into Deficiency Bill and Face Battle in House Today

MELLON ASSAILED BY TEXAN

EUROPEAN BLOC CUT OUR MOVIE SALES

Drops in 1926 Bought 313 American Feature Films, Against 368 in 1927.

CONTINENTAL OUTPUT UP

Germany Disposed of 31 and Britain 13 More in Year—Full Effect Not Yet Felt.

New Rockefeller Fund Provides $2,500,000 For Salvation Army and Four Other Charities

PLANE UP 84 HOURS, STILL GOING STRONG

Question Mark Breaks All the Endurance Records Except Those of Dirigibles.

SEEKS TO BEAT ZEPPELIN

Crew Fought Desperately and Won Against a Night of Fogs, Clouds and Down Drafts.

BERENGARIA REGAINS MAILS BY NEW ORDER

Rule Limiting Letters to Lifted When Protective Lead Is Cut to About Ia Depart.

SAILS WITH REDUCED CARGO

African Deity Discrimination Here, but Point to British Delay of Yuletide Gifts.

RAIL CLASH FORESEEN IN NEW MERGER MOVE BY VAN SWERINGENS

Open Break on Prospect With Road That Has Opposed Major Consolidations.

CENTRAL FACING PRESSURE

It Would Be Forced to Declare Stand on Proposal to Make Negotiations Public.

THE P. R. R. IS CHALLENGED

S. & O. to Join Them in Plea to I. C. C. for Leave to Buy Lines Vital to Trunk Plants.

Mexican Heads Apache Band To Recover Kidnapped Son

MERGER IS APPROVED BY R. G. A. AND VICTOR

Boards Accept Terms Uniting $626,540,000 Concerns To Advance Reproduc ng Art.

RADIO VOTES 5 TO 1 SPLIT

Phonograph Stockholders Get One Share of Common With $5 Preferred and $5 Cash.

WHALEN LIQUOR WAR PRESSED AS TUTTLE PLEDGES FEDERAL AID

20 More Speakeasies Raided on Police Campaign Goes On to Show It Is Not "Spasmodic."

STRONG-ARM MEN AT WORK

Commissioner and Prosecutor to Conspire to Fight Rum and Drugs and Ease Courts.

NOT TRYING TO DRY UP CITY

But Whalen Promises He Garners Not Forms Being Organized by Arrests in Round Up Threatened.

Bank Cashier Indicted on $174,000 Thefts; He Is Said to Have Embezzled for 35 Years

Gotham Co. and Black, Starr & Frost to Merge; 5th Av. Silver and Jewelry Shops Negotiating

AN EXAMPLE OF BALANCED MAKE-UP

effect, but it accentuates the tombstones by producing two sets of them, one above the other.

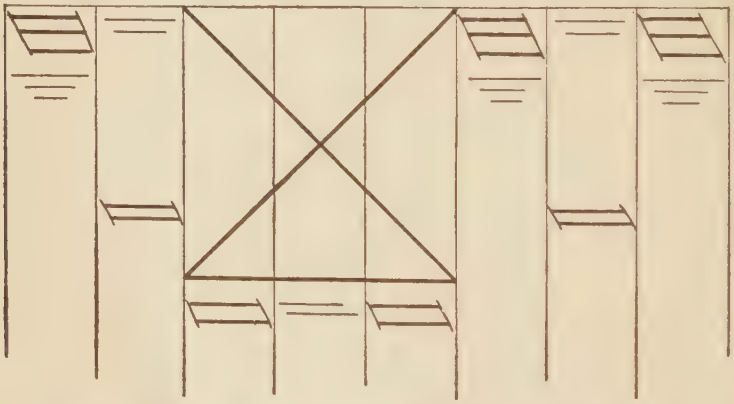
If absolute symmetry is to be maintained, there is no way of avoiding tombstones in an eight-column page, and papers such as the *New York Times* do not try to get away from them, though they attempt to avoid more than one set on a page and permit only the smaller secondary heads to come together. Such

heads, which usually have a two-part drop-line for the top deck, do not look so objectionable when brought together, for there is usually enough white space in the steps to keep the heads from looking as if they were run together. The best make-up practice, however, seeks to avoid tombstones altogether.

They can easily be avoided, of course, if the editor is willing to sacrifice a little symmetry by substituting one light head for one of the two making the tombstone. If, for instance, in the first of the eight-column layouts shown above, a light subordinate head had been substituted for the secondary head in column 5, the page would still have had a feeling of balance without any tombstone.

Few of the papers using the symmetrical page adhere to a strict balance every day, but vary their make-up enough to avoid monotony. Often the *New York Times*, while preserving a certain balance, goes over to what amounts almost to the brace or focus style of make-up to be described later.

The most familiar device for getting variation in an eight-column balanced page is to place a three-column cut or cartoon in columns 3, 4, and 5 or columns 4, 5, and 6. That leaves an odd number of top columns, which can easily be balanced, and permits also a balanced layout of heads beneath the cut, as shown below:



Another device used by many papers is to run an editorial column such as Brisbane's "Today" the full length of column 1. That leaves seven columns for the display of news—again an odd number that can easily be balanced.

### THE CONTRAST AND BALANCE PAGE

In using the second style of make-up, the editor, while preserving a certain feeling of symmetry, studiously tries to avoid a perfect balance between alternate columns. He tries to achieve his effect by the same principle with which the advertiser gets non-bisymmetrical balance in his layouts. He weighs his heavier masses against each other not only across the page, but diagonally from top to bottom on either side. With the center of the page as his fulcrum, he balances uneven weights against each other by placing them at unequal distances from the center.

Just as in advertisements, this style of make-up creates a more informal newspaper page. It gets away from the stilted stiffness of perfect balance. It appears more natural, more spontaneous; it makes a friendlier, more interesting and inviting page. Furthermore, it permits a better play of the news. The trouble with the perfectly balanced page is that stories must be selected according to their length rather than their interest in order to make the page come out right. Or, if that is not done, there must be a great deal of cutting and carrying inside of the ends of stories in order to permit a balancing of the heads underneath. There is too much artificiality about the formally balanced page, too much cutting of the news to fit a set pattern. The contrast and balance page, on the other hand, with its irregular placing of heads, permits stories to be played according to their importance and their varying lengths and contributes to the informality of the page.

The make-up editor may work with single-, double-, or even triple-column heads, placing them in irregular positions on the page, yet so arranged that when looked at as a whole the page has a real feeling of balance and typographic beauty.

Just as non-bisymmetric balance permits the advertiser greater freedom in layout, so this type of page make-up enables the editor to get more variety and far more interesting effects than are possible with the perfectly balanced page. It makes it possible to make the front page look different every day, and creates in the minds of readers the feeling that this constant variety is an evidence of alertness and enterprise on the part of the newspaper. It gives the effect of presenting more news in a livelier and more interesting manner than any other type of make-up.

LATEST THE MILWAUKEE JOURNAL LATEST

Forty-seventh Year — Thursday, January 24, 1929 — 30 Pages—Latest Edition

# Capt. Fried Tells of Ship Rescue

## Morrow Eliminated for Cabinet Position

More Valued as Mexican Envoy, It Develops After Hoover Visit

*Politics Financed by People's Money*

## Young Bandit Ties Up Clerk

Holds Up Drug Store in Daylight, Escapes With $20

$15,000 Breach Case Is Given to the Jury

Pensions Bill Passed

Buried by Drift, Passengers Safe

Two Smothered

Milwaukee

'Home Town Boy' Stuff

Week Blocks Tunnel

Wind Shifts, City Saved From Cold

The Weather

He's Got to Whip This Fellow

## Frauds Laid to Contractor

Brought Back Hereto Face Charges of Embezzlement

*Gangland Plotted Torture but Had to Cut It Short*

## Ice Is Hard, Agents Away

Sh Rule Smuggled at Detroit Have a Fine Large Time

## Bandit Slays Chicago Girl

Killer Seen Dragging Body, but He Makes Escape

Planes Seek Man on Michigan Ice

*Sleeps in Hearse, Escapes Blizzard*

Train Hits School Bus One Killed

Poland's Population Is Gaining Steadily

## Borah Warns of Navy Race With Britain

Opens Fight Against Bill for 15 New Cruisers, Tax Refund Publicity Voted

*Daughter of Former Senator Is Arrested as Drunken Driver*

## Judge Reverses in Drys' Trial

Changes Mind About Freeing One of Alleged Killers

*Rich U. S. Widow to Marry Prince of Ancient House*

*It Was a Clean Place —With Excellent Beer*

## Radio Given Large Credit in Sea Epic

Stricken Crew Had to Be Hoisted to U. S. Boat; Medals Asked for Heroes

AN INTERESTING EXAMPLE OF CONTRAST AND BALANCE MAKE-UP

The *Milwaukee Journal's* front page is one of the best examples of the contrast and balance style of make-up. Observe in the page shown above that the heads, while placed irregularly about the page, still create a certain feeling of balance. The headlines A, B, C, and D on the right-hand side of the page would be outweighed by the cartoon and by the headlines

LATEST **THE MILWAUKEE JOURNAL** LATEST

Forty-seventh Year — Tuesday, January 22, 1929 — 30 Pages—Latest Edition

# 17 Killed as Ohio Interurban Hits Bus

## Agree on Arbitration to Settle Milk Strike

### Chicago Dealers Will Meet Dairy Owners to Settle New Price

## Reveal Senate Vote on West

### Coalition of Democrats, Regular Republicans Wins

## Milwaukee

### A Mayor's Council

At Least a Black Eye

## 8 Below Zero to Follow Snow and Sleet Storm

### Three-Inch Fall Recorded Here; Cold Wave Follows Shift in Wind

## Hoover Believes All Will Soon Be Safe for President

## Pine Is Absolved of Bribe Charge

## City May Buy Steel Co. Tract

### Seeks Illinois Firm's Property for Use in Port Development

## Seize Fortune in Real Liquor

### Federal Men Seal 30 Barrels of Whisky at Kissinger's

## Snow Plows, Flatirons Use Record Current

## 1,000 Greek Homes Burn in Constantinople Blaze

## Byrd Outsmarts Killer Whales Chasing Boat

### Five Men in Exploring Leap on Ice Shoe to Escape Tigers of Antarctic Sea

## Crash Occurs in a Blinding Fall of Snow

### 15 Taken to Hospital, No One in Electric Train Is Injured Seriously

## Series of Quakes Terrify Alaskans

## Ship Is Sinking, Says SOS Call

## Farm Caretaker Frozen to Death

## Negro Actor Kills Self by Loading a Stage Cannon

ANOTHER FORM OF CONTRAST AND BALANCE MAKE-UP

Contrast this page with the preceding one and note the variety of arrangement made possible by this one type of make-up.

E, F, G, and H on the left-hand side were it not for the two-column italic head in the lower right-hand corner, which balances the heavy two-column head in the upper left-hand corner and gives the right-hand side the necessary added strength.

Note also that the number of headlines displayed makes the page look newsy and interesting. Yet, it cannot be said that this page is loud or blatant in its make-up. On the contrary, it is quite conservative.

The constant variety that is possible with this style of make-up can be readily seen by studying a second *Milwaukee Journal* page, which appeared two days earlier. By using five two-column heads and but four single-column top and secondary heads, the make-up editor has achieved an altogether different effect, but with the same feeling of contrast and balance.

This type of make-up is harder to handle than the strictly symmetrical page. It takes careful weighing and planning to get that effect of balance with contrast while placing the heads, cuts, and boxes at irregular positions about the page. But practice brings a certain feeling for this type of balance. The experienced make-up editor can build this kind of page more quickly than the strictly symmetrical kind because of the greater freedom permitted.

### BRACE MAKE-UP

The third style of make-up is the brace or focused page. Instead of spreading out the various major stories in any kind of a balanced scheme over a page, this form of make-up directs the reader's attention to the upper right-hand corner of the page.

This form of page layout plays one big story in each edition, usually with a spread head over two or three columns. The rest of the page is built up to focus attention in the upper right-hand corner, as shown in the *New York Herald Tribune* page opposite.

Observe that the secondary heads on this page are arranged diagonally across the page to form the hypotenuse of the display triangle. It was this arrangement which gave this type of page its name. Make-up editors saw in this display triangle a rough resemblance to a wall bracket or brace.

Newspapers which use some major heads below the fold try to arrange them in descending order to create the effect of a second diagonal line of heads supporting the one above. The whole result is to focus attention on the major display, as illustrated in the *New York Evening Post* page on page 315.

THE WEATHER
Today: Fair, continued cold; diminishing north-west winds. Tomorrow: Clouds and warmer; probably followed by rain or snow.
Yesterday's Temperatures: Max. 38, Min. 27

NEW YORK
Herald Tribune

NEW YORK HERALD TRIBUNE Established March 16, 1924
NEW YORK HERALD Founded May 6, 1835
NEW YORK TRIBUNE Founded April 10, 1841

Vol. LXXXVIII No. 30,010 MONDAY, JANUARY 14, 1929

## Smith Talks To Roosevelt On Future of Democracy

Visits Governor at Albany to Discuss Means of Strengthening Party for Next National Election

3,000 County Chiefs Replies Are Studied

Urge National Committee Be Kept Active—Former Executive to Speak on Radio Wednesday Night

## City Must Set Budget Limit, Berry Warns

Comptroller Also Appeals to Board of Estimate for Reduction in Bond Issues to Cut Down Funded Debt

Bridges and Tunnel Financing Advised

Criticizes Large Demands From Bureau for Extra Motor Car Improvements

## Emil Fuchs, Famed Artist, Ends His Life

Sculptor and Painter, 62, Cancer Sufferer, Found by Sister in Midst of His 50-Year Art Collection

'No Help for Me,' His Note Explains

Companion and Portrayer of Royalty Enriched Culture of Five Nations

## Morgan Expected to Bar Reparation Financing by German Bond Sales Here

### *Paris and Berlin Greet Morgan As Aid to Reparations Success*

German Press Acclaims Financier as Type Needed to Settle Banker's Problem; Commission Formally to Name American Experts This Week

## 2 Die in Crash As Snow Brings City Cold Wave

Another Is Injured Seriously as Cars Skid Into 5; Mercury Down to 11 Degrees

## Mrs. Ruth Dies In Fire; Parted From Ball Star

Estranged Wife of Babe Ruth Is Burned to Death as Blaze Destroys Victoria's Home

## Pinner to Tell Of Bankruptcy Frauds Today

Court Messenger Removed After Separate Attempts to Serve Him

## President Fails To End Deadlock On Kellogg Pact

Senate Debate Will Be Resumed Today, but Borah Says Agreement Is Impossible

## Allies' Favored Proposal Neither Practical Nor Desirable Now, Is View of Banking Leaders

## Annuity Time Limit Also May Be Urged

## Financier's Prestige as Unofficial Expert Is Viewed as Aiding the Success of Conference

## Summary of Today's News

## 13 Cab Drivers Robbed As 3 Gangs Raid Garage

## Six Sightseers Run Fire Gantlet Atop the Woolworth Building

## Sawyer Pierces Limelight Down for Short Time

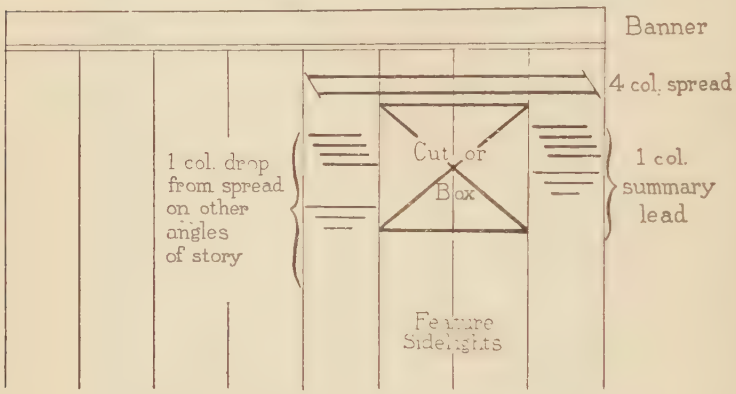
Beloels Plans at Confidential and Fine Of Record Size

## Salesmen

shows. Obviously brace make-up is the only practical type for this kind of display.

Brace make-up is very convenient when a really big story breaks, a disaster story for instance, which demands extraordinary display accompanied by pictures, diagrams or maps, and subsidiary stories playing up different angles of the main event. Many papers which ordinarily use the formally balanced page or the contrast and balance page use the brace make-up whenever they have an extraordinary story to play.

It can be readily used under a banner head simply by making the banner read out into a two-, three-, or four-column spread. Such a page make-up might be arranged as follows:




This is often called "emergency make-up." The ingenious editor will find any number of variations to play upon in creating a big display for a really important story. In handling major disasters, such as the sinking of the steamer *Vestris*, many papers carried the display over to inside pages. The main story, running down column 8, turns naturally over on page 2. Here, focus make-up again can be used effectively, especially if built around cuts and boxes. On inside pages, however, the focus is directed to the upper left-hand corner, where the eye first strikes the page.

### BROKEN PAGE MAKE-UP

Some editors, realizing that most newspapers strive for some sort of balance, seek to make their pages different by carefully

SPORTS EXTRA ★★★★★★ Latest Racing Results

# New York Evening Post

SPORTS EXTRA ★★★★★ Closing Prices—All Stocks Complete Bid and Asked

THREE 3 CENTS FRIDAY DECEMBER 28 1928 THREE 3 CENTS

GEORGE V GAINS AFTER RELAPSE; STAMINA STATIC

Bandmaster Sullette Reports Strength Isn't Returning With Long Improvement

RULER PASSES FAIR NIGHT; MAIN TAKES NOURISHMENT

Doctors, in Long Consultation, Adopt New Methods—No Word on Blood Test

Mint Toddy Conquers In Second at Jefferson

One Way Gets Place and Sun Ranger Show Victory—N. A. Champion's Loss Page 19.20 in Opening Event at New Orleans

Late News and Racing

JEFFERSON PARK At—Twelve Furlongs. 13.80, 12.60, 3.40. Coupon Class. 3.80, 3.00 The Duke 2.80, 2.10 scratches.

FOURTH RACE AT JEFFERSON PARK

1st—GRAND PRINCE
2d—HYPNOTISM
3d—SUNNYFISH

No scratches.

HAVANA—Mat Results, 1st—Ro... and Spanish Kiss, $4, 2.60, Mercado... 3d Revolved Tomorrow. Entries Known. Sport Today Doubles

HAVANA—4th—1, Thomas A. 2, Rose de A. Pomposo. Scratched: Chico.

WISCONSIN SHERIFF QUITS UNDER FIRE

RACINE, Wis., Dec. 28 (AP)—Sheriff ... Wright, Racine county, ... of ... Commissioners was requested today. Sheriff Wright ... Commissioners was expected to appear ... to ... Wright, charged with attempting to bribe Federal jury agents.

PENNSYLVANIA AUTOIST FOUND DEAD

SCRANTON, Pa., Dec. 28 (AP)—David Miller of Philadelphia, ... was found in the woodland of an automobile ... with bullet holes. The car had apparently skidded ... the ... road.

MAN KILLED IN PENNSYLVANIA CRASH

ALTOONA, Pa., Dec. 28 (AP)—Three People of Duncansville were killed and ... persons were injured ... in an automobile collision ... Hollidaysburg ... Sunday ... Dead:

HELD IN PITTSBURGH IN $25,000 N. Y. THEFT

GRID RULES STAND, E. K. HALL REPORTS

"Material Changes Are Not Deemed Necessary" Rule Committee Head Says

SHARKEY, STRIBLING TO FIGHT FEB. 27

Richard Fitzpatrick Signs Purse Bout Will Be at Miami Beach

$50,000 GIFT TO AID STUDY OF CANCER

PUBLISHER CALLS DIVORCE FRAMED

Havana Results

Inside the Pool

Jefferson Park Results

By the Associated Press

FIRST RACE—Aloe, 9.20, 4.80, 3.20. Golden Brown, 20.80, 8.40. Galatea, 4.80.

SECOND RACE—Mont Teddy, 4.60, 3.20, 2.20. Con Way, 4.60, 3.00. Sun Ranger, 4.60.

Jefferson Charts on Page 19.

PARAGUAY FLARES, CHARGING BOLIVIA WITH NEW ATTACK

Washington Legation Says Troops Have Again Occupied Fort in Disputed Territory

DECLARES ONLY PATIENCE HAS PREVENTED FIGHTING

Diet Hints That Conciliatory Attitude May Yet Be Tried Beyond Endurance

Still in Politics

ROOSEVELT NAMES CROSS AS CHIEF AID

Selects Suffolk County Assemblyman as Secretary—State Appointment Due

WILSON SPEECH TONIGHT

FEAR PLOT TO FREE LIVERMORE ROBBER

Guns Guard Arthur Barry on Way From Sing Sing to Eastchester Witness

PRESIDENT SHOOTS 6 QUAIL IN GEORGIA

Drops Sapelo Island Birds on Half Hour Excursion Into Coffee Preserves

SHE MARK IN MUST SERVE FULL TERM

PAY FOR MURDER IN 1916

BRITISH LEGATION AT KABUL IS TORN BY REBEL SHELLS

Evacuation of City Near as Bombardment Menaces and Supplies Dwindle

EMEMY OVERTS RIVER, STOPS ELECTRIC POWER

Radio Link to India Restored When Kh g's Troops Take Hill Near Town

JUDGE FINDS HOME FOR ORPHAN THIEF

CONVICT 421 FELONS IN BRONX THIS YEAR

Turkey and Afghanistan—Anita Loos In the Saturday Post

MORE ROTHSTEIN WITNESSES FOUND; BLOW AT M'MANUS

Seeks Opera Site

JOHN D. ROCKEFELLER JR.

ROCKEFELLER SEEKS TO BUY OPERA SITE

Spokesmen Admit Negotiations Are Under Way for Purchase of Three Mid-town Blocks

SUM SET AT $100,000,000

BEAVERBROOK HURT IN LONDON CRASH

PHILA. POLICE CAPTAIN OUT

Whalen Digs Up Testimony Hitting Defense of Gambler

SHOT VICTIM SEEN LURCHING FROM ROOM

Narcotics Feud Latest Theory to Be Considered by Detectives in Case

AIRWAYS HEAD ASKS DIVORCE AFTER BOY'S

MYSTERY L. I. BLAST RAZES EMPTY HOME

COASTS SEE SUNDI RANCE RECORD

A NIGHT MESSAGE IN BOTTLE, REPORT

THE WEATHER

AN INTERESTING EXAMPLE OF FOCUS MAKE-UP

Note the two diagonal lines of heads on this page focusing attention on the major display.

trying to avoid any suggestion of balance. Heads are scattered irregularly over the page, without any apparent arrangement. As a matter of fact, it takes more careful planning to avoid balance than to secure it. If care is taken in such an arrangement, a page can be made quite effective by its very novelty.

Complete Wire Reports of UNITED PRESS, The Greatest World-Wide News Service

# The Indianapolis Times

HOME

Unsettled tonight and Thursday, probably rain, not much change in temperature, lowest tonight somewhat above freezing

VOLUME 40—NUMBER 163 INDIANAPOLIS, WEDNESDAY NOV. 28, 1928 TWO CENTS

## WALES RACES TO BEDSIDE OF KING GEORGE

Warship to Await at Harbor Town to Speed Journey Home.

DOCTOR IS WORRIED

Admits in Letter to Cabinet That Condition of Ruler Is Serious.

BY KENT COOPER
United Press Staff Correspondent

LONDON, Nov. 28.—Lord Dawson of Penn, physician to the British royal family, has written a letter to the British cabinet in which he admits that the condition of King George is serious.

While the king's personnel was hastening a journey by car of extraordinary length, the Prince of Wales, heir to the throne, was speeding across Africa on the chief of a train to his father's bedside.

Lord Dawson's statement was contained in a letter to Sir Wilfrid Greene, cabinet secretary, which was read apparently was issued in response to a request from the cabinet that it be informed in detail of the king's exact condition.

### Royal Letter to Cabinet

The letter, as read at a meeting of the cabinet, said in part:

"My dear secretary:

"I gather from you that the cabinet wish a more detailed opinion on his majesty's illness than is contained in the bulletins issued by me, therefore, before I come to that.

"The king is suffering from an infection (bronchial pneumonia) of the right lung with extensive pleural effusion of the same side which is painful condition. Such infection is always grave in old people.

"In all illnesses of this character there must be anxiety which will continue for the present, but I can honestly say that the king passed a better night than he has had for a week and his lung shows some improvement. His strength is maintained.

"After the operation I became a little anxious, but the disease is now responding splendidly and I am confident will be corrected."

### Volunteers to Convey

Lord Dawson's statement revealed for the first time what had been generally accepted that the king's sufferings from chronic bronchitis had recently assumed serious proportions.

A touching and dramatic instance was disclosed by the Evening News today. The News said: "Hundreds of volunteers for the honor of conveyance of the Prince of Wales to or from, said to those at his bedside:

"Tell father I am coming. Tell him that I know he will soon be all right tomorrow."

It is estimated it will take seven days for the prince to make the journey.

The news said the voluntary departure of the Prince of Wales to rejoin his father deeply stirred the king.

The News understands that the visit of the prince may be the last he will have to make.

A dramatic story of how the Prince of Wales received the news of his father's illness while in Africa, including the sad duties of being host to the governor of the British empire ready to speak his promise, was told today by Lord Cecil, who has been host to Governor Geddes.

The admiralty announced the cruiser Hawkins, one of the fastest in the British navy, has been ordered from the Cape of Good Hope, to be at its prince's disposal.

## VERDUN BISHOP VISITS

Receives Pontifical Mission in Chicago Relating to Code of Precedent.

By United Press

NEW YORK, Nov. 28.—Bishop Charles Joseph of Verdun, whose ecclesiastical vestments marked him the only bishop in the United States, arrived this morning, refusing to say about the Pontiac Near Paris. He is here to confer with Cardinal Hayes and President Coolidge.

## GETS 'LIFE' FOR BOOZE

Convicted Four Times for Dry Violations, He Gets 'Starter'

By United Press

FLINT, Mich., Nov. 28.—Convicted for the fourth time of violating the prohibition law, Charles Pippo, 37, was sentenced today to life in prison.

A jury had recommended mercy in eleven hours.

## CHEERIO'S U. S. LEGS

Britain Wonders Whether Wonderful Wireless Like Small Boat Song.

By United Press

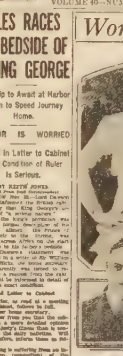
NEW YORK, Nov. 28.—Arms Secretary Wm. Bryson Hearst has discovered that the American boy is the wireless wonder of the world.

In the December issue of the American Mercury, Mark Watt writes:

"The boy before Britain's Parliament is talked roughly that it is time to do something about wireless laughed by the army, Secretary of War Davis Britannia, and The Royal Navy of the England.

Basis rates for out of town business must be paid in advance. Times Publishing Co., 214 W. Maryland St. Indianapolis. Subscription rates, daily and Sunday, 12 cents per week; daily only, 10 cents per week; Sunday only, 5 cents per week. Mail subscription rates, daily and Sunday, $6 per year; daily only, $4 per year; Sunday only, $2 per year. Entered as second class matter at postoffice, Indianapolis, Ind. Under act of March 3, 1879. Member of United Press, Scripps-Howard Newspaper Alliance, Newspaper Enterprise Association, Audit Bureau of Circulations.

## World's Richest Girl Couldn't Buy Happiness



Here is a new portrait of Miss Catherine Barker Stoddard, shown as she appeared when she was the first girl to receive the coveted Edward W. Bok medal for "most distinguished service by an American girl in citizenship." Miss Stoddard, who died in Paris, left $50,000,000 to Harvard university.

## NURSE KILLS OLD LOVER IN HOSPITAL

Shoots Policeman, Then Turns Gun on Self; Expected to Die.

By United Press

DENTON, Colo., Nov. 28.—Patrolman King, 35, a native of the Denton community, was shot and killed by Mrs. Grace Patterson, 50, R. N., nurse, in the Denton hospital here today. Mrs. Patterson then shot herself through the head and is expected to die.

King had for years been the nurse's sweetheart, police say.

Mrs. King, wife of the slain officer, was a nurse in the hospital at the time of the shooting.

Mrs. Patterson has been employed at the hospital for several years.

## Sh, Milkmen!

By United Press

BOSTON, Nov. 28.—Cream and milk thefts reported in public dairy between and Nov. 1 to Nov. 15 are investigated as result of a bulletin issued by the state department of agriculture.

Officials said bandits have been operating in the city and suburbs for more than a year. Cost to dairymen is estimated at $1,000.

## FIRE LOSS $100,000

Three Stores, Two Houses Burn in Bedford.

By United Press

BEDFORD, Ind., Nov. 28.—Fire of unknown origin today destroyed three business buildings on the south side of the public square, causing a loss estimated at $100,000. The property destroyed was owned by Mrs. Mary Lucas.

Wrong Lucas, $50,000 Estate

Mrs. Lucas, who died in June, left an estate valued at $50,000. Her will was filed for probate in the Lawrence circuit court today.

## THANKSGIVING WEATHER: CLOUDY AND UNSETTLED

Clouds and scattered—occasional showers—perhaps a few tables of snow, but no warmer is said in the ground—underfoot weather forecast Thanksgiving day.

Temperatures getting warm is said beginning 32 degrees in the early morning, but rising to 40 or 45 degrees by the day.

That will be Indianapolis Thanksgiving weather Armistice weather forecast.

It has rained two of the most Thanksgiving days in the last 10 years, but the sun shone in 1927. There has been only three and Thursday.

*One Edition*

The Times following its custom of giving its customers a part holiday on Thanksgiving day, will be published only one edition Thursday.

## WRIGHT CASE IS DISMISSED

Refuse to Admit Gun as Evidence Arrested on New Charge

Homer Wright, 37, was dismissed of a charge of carrying a pistol without a permit in municipal court today by Judge Dietrich when state police refused to admit the gun as evidence.

Wright was arrested last night by police on a charge of carrying a pistol without a permit. He was released on $500 bond.

### Charge Is Dismissed

Prosecutor Evan Washburn, state department, rose to his feet and told the court that the police officer who arrested Wright had failed to appear in court to testify against the defendant. Washburn asked that the charge be dismissed.

The police commission charges against Wright, the officers said, were made by Mrs. Wright, who is now in Florida. Wright is married and has a child.

## 'Sleep Ill' Ends Life of Golfer

Noted Amateur Dies After Long Siege of Illness Here.

John Barkwedge Derrington, 55, of the sports New Jersey golfer who was a nationally known golfer and a member of the Walker cup team in 1922, died at 10:30 this morning at the home of his brother, Dr. Charles Derrington, 1120 N. Delaware st.

Mr. Derrington became ill last winter and was taken to the home of his brother. He was a member of the Columbia club.

He was born in Baltimore, Md., and was graduated from Princeton university in 1895. He was a member of the Columbia club.

Mr. Derrington was a member of the Columbia club.

He was a member of the Columbia club.

He was a member of the Columbia club.

He

WEATHER

# THE CAPITAL TIMES

Official Paper of the State of Wisconsin

HOME EDITION

VOL. 23, NO. 10. MADISON, WIS., SATURDAY, DECEMBER 22, 1923 TWELVE PAGES PRICE THREE CENTS

It's Right Here in Black and White!

# Judge Backus U. Regent

## Patterson to Head Conservation Body

## L. B. Nagler Leaves Post

## U.S. Nabs Sheriff Wright

## Milwaukeean Succeeds To Wild's Post

Governor Names Sentinel Publisher To "U" Board

OTHERS APPOINTED

Wenger Succeeds Morton On State Annuity Board

## January 1st

Acting Director To Draw $5,000 Per Year, Report

## Railmen Here Get $25,000 Back Pay

RESIGNS

Retroactive Wage Raise Averages $62 For 400 In City

## Conspiracy In Rum Deal Is Charged

Col. Johns, Minaken Quit; Justeson County Official At Hearing

Zimmerman Drops Yule "Please" In Their Hands Today

## Name 5 New County Fair Superintendents

County May Get Title To Grounds, Four Dates Aug. 20-23

## Langley Given Full Pardon By President

## Waterloo Water Suit Depends On New Audit

Mayor Presents Former Woman Bookkeeper If Shortage Is Found

## Mazomanie Is Again Ordered To Change Utility Accounting

## Estimates Board O.K.'s 2 New Schools Here

## Kenosha Nabs Kane, Alleged Killer of Cop

12-Year Hunt For Jewel Thief Gang Member Ended, Claim

## Murderer is Freed; Must Quit Country

## Three Injured In Monona Rd. Auto Smashup

Man, Wife, Other Woman Hurt In Crash Early Today

## Two Baraboo Men Get Probationary Terms Here Today

## Science Lifts Humanity, Is Hoover's View

Praises Modern Inventions In Address At Brazil

## Civic Orchestra, Boy Scouts Get $5,000 Each In Budget

## Baldwin Is Named Local Lodge Head

## Grab Liquor Cargo, Arrest Two In Raid At Richland Center

## Budget $200 For Investigation by Auditorium Body

## Sinaiko Rites May Be Held Sunday

## VERONA WOMAN, MOTHER OF TEN CHILDREN, DIES

## "OLD SOL'S" LONGER HOURS START SUNDAY

Today Shortest, of Year; Winter Begins Officially Today

## Beck To Testify In Slush Probe, Belief

Note the liveliness of this broken page make-up

possible exception of the two outside columns, no column extends in a straight line to the bottom of the page. The front page of the *Indianapolis Times*, one of the group of Scripps Howard papers which frequently use this form of make-up, is presented on the adjoining page as an example of broken page make-up. Observe that, with the exception of columns 1 and 8, all of

the columns are broken somewhere down on the page by either two- or three-column heads. Note also the four-column head at the bottom.

The front page of the *Capital Times*, of Madison, Wisconsin, is an even better example. Note the studied attempt to avoid balance by the irregular placing of heads all over the page. Yet, the make-up man has achieved a certain orderliness in that arrangement, and there is enough contrast between the different types of heads used so that the page is not displeasing. One of the characteristics of this type of newspaper front page is the large number of stories and heads that are displayed. This, combined with the variety of their arrangement, makes the page seem fairly bursting with news. When not overdisplayed, it is a type of page that can be made quite effective.

The *Capital Times* has, however, overdone display at the top of the page. Excellent as may be the mixed make-up of the rest of the page, that concentration of three streamers, three top heads, and a spread head is too much. It makes the top third of this page one mass of headlines. It is hard for the reader to pick a starting place. That is one of the dangers of this type of front page make-up.

Mixed make-up is the style that lends itself most readily to sensational make-up. In its more extreme forms, this type of page resolves itself into what is known as "circus make-up." The whole page becomes a jumble of headlines, boxes, and cuts of all widths and sizes, dumped helter-skelter into the page, each head fairly shrieking for attention. It is the type of make-up much used by Hearst newspapers and others making an appeal to mass circulation. Unfortunately it has been copied by many small city papers seeking to ape big city style.

Circus make-up has little to commend it. It defeats its own purpose by overdisplay. By seeking to give emphasis to every headline, it really gives emphasis to none. No page can be read with ease when all the headlines are set in the same large black type and all clamor for attention. There must be some high spot on which the eye can focus, or the reader will be hopelessly confused in the jumble of headlines. There must be sufficient contrast between light and dark heads, or there can be no emphasis. Sensational circus make-up violates all rules of typographic balance and harmony.

RACE TRACK SCANDAL IN DRUG RAID
FINAL NEWS EDITION
NEW YORK JOURNAL
FINAL NEWS EDITION
WOMAN ROBBED OF DIAMONDS IN TAXI
UNPAID LOAN VICTIMS
$5,000,000 Will by Rich Bride
LASKER TO FACE OIL PROBERS
DRUG RAID POINTS TO RACE TRACK SCANDAL; HORSES DOPED, CHARGE
LONG TRIPS TO DADDY
EX-SHIP BOARD HEAD TO BE ASKED IF HE GOT "SLUSH" BONDS
WOMAN BEATEN, ROBBED IN TAXI; TWO CAUGHT
SNIZEK BURIED TODAY WITH MILITARY HONORS
NEW OIL CASE REPLY EXPECTED FROM SMITH
JOHN D., JR.; SCHWAB TO AID MINE REFORM
BUTLER'S RICH BRIDE DRAWS UP NEW WILL
PROBABLE WINNERS AT JEFFERSON PARK
FERRY PASSENGERS STOP WOMAN FROM SUICIDE
CHIEF AND SIX POLICE ARE HELD IN MURDERS
Today's Journal
CONSENSUS OF SELECTIONS
Moe and Joe Have Late Special

A TYPICAL EXAMPLE OF CIRCUS MAKE-UP

The excitement-breeding sensational papers find circus make-up best adapted for their purposes, but for the average newspaper it is the least effective and least attractive that can be used. A reader's good will toward his newspaper is not increased if his attention is scattered and his energy dissipated in the search for news that is buried by heavy display.[5]

[5] Norman T. Radder, *Newspaper Make-up and Headlines*, p. 182.

### THE NECESSITY OF WATCHING HEADLINE FORMS

No matter what style of front page make-up is used, it takes the proper use of headline forms to make the page interesting and effective. No matter how perfectly balanced a page may be, it will look dull, weak, and uninviting unless its top heads are strong enough to hold up the top of the page and unless there are enough good secondary heads between the top and the fold to liven up this area.

Many papers present an admirable top of page balance and forget the rest of the page. Top heads may be sufficiently strong and well constructed, and three or four inches below the top there may be two or three good secondary heads, but below that the page is one long gray expanse of dullness. In newspaper parlance such pages are said to be "weak in the stomach." The remedy is simple. All that is needed is to introduce a good secondary head or two just above the fold. Subordinate heads can then follow in a descending order of sizes in order to lead the reader's eye down into the page.

The bottom of the page also needs special attention. The use of one or two two-column italic feature heads will probably help more than anything else to put life into the area below the fold. One-column boxes and an occasional lightweight cut also will help. The use of a number of "shorts" under 10-, 12-, and 14-point heads, sufficiently leaded to allow some light through the lower part of the page, will give the effect of newsiness and variety.

### MAKING UP THE REST OF THE PAPER

The first question to be considered is the number of pages. On smaller papers using flat bed presses, the number is determined by the capacity of the press. It may be that eight pages is all the press can handle. Any number above that will have to be printed as an insert or a special section.

With rotary presses, however, the capacity is greater and the number of pages is usually determined by the amount of advertising. Most papers feel that they must carry at least 55 to 60 per cent advertising, leaving 35 to 40 per cent for news in order to make any money. Some papers carry as high as 75 to 80 per cent advertising. Such a policy, however, often causes

dissatisfaction on the part of the readers because they feel that they are not getting enough news for their money when page after page is almost solid advertising.

The size of the paper for any one day is decided on the basis of the amount of advertising scheduled. If, for instance, the advertising manager has 84 columns of advertising scheduled, on the basis of a 60 per cent paper, this would mean that the news staff would be allotted 56 columns, making a total of 140 columns. Figuring eight columns to the page, the paper therefore would start the day with 18 pages. As additional advertising comes in, the number of pages goes up, usually in units of four, though modern presses can easily fold a single sheet insert inside the folios to make an addition of only two pages. It is obvious that at least two pages must be added each time, for it would be a waste of money and paper to print only one side of the sheet.

### A SECOND FRONT PAGE

When the number of pages has increased sufficiently, the editor may decide to get out his paper in two or more sections. Many small city papers, publishing 12 to 16 pages daily, print two sections every day because of the fact that this gives a second front page on which to display additional news. Editors contend that this makes the reader feel he is getting more for his money and builds good will for the paper. Most of the larger daily papers are printed in two sections also, and while the second front page is a valuable feature, a more important factor is that this arrangement permits increased speed in printing. If a second section can be printed on another unit of the press at the same time as the first section is running, it is clear that the speed of printing has been doubled.

Breaking the paper into two or more sections has advantages for the reader, too, in that the smaller parts are easier to handle than bulky single sections. They also enable several members of the family to enjoy the paper at the same time.

The second front page has become an important feature with many papers. Some use it to display local news and features; others use it as a front sport page. Many editors find a second front page a great convenience in getting out special editions during the day. For the state edition, for example, this page can

THE Universal STORES
THURS., FRI. & SAT., FEB. 21-22-23
DARLINGTON, WISCONSIN
COUNTRY CLUB
Quick Oats
3 25c
Large Pkg. ..... 19c
Flour $1.75
Oleo 2 lbs. 35c
Soup 3 cans 25c
Salt 2-lb. pkg. 10c
OLIVES, Stuffed 3 1-2-oz. size 10c
HOMINY, 2 1-2-size can 3 for 29c
KRAUT, Frank's, lg. size 3 cans 37c
HAMS, Boned and Rolled pound 22c
CABBAGE, New crop pound 5c
LEMONS, 300-size Dozen 30c
COACONUT lb. bulk 25c
DRIED APRICOTS lb. 29c
DRIED PEACHES lb. 17c
PANCAKE 5-lb. sack 25c
PEAS or CORN 3 cans 29c
BREAD 8c
FRENCH Brand Coffee lb. 42c
Community Topics
Vol II Thursday, February 21, 1923 No. 38
Penniston Coal Co.
Darlington, Wisconsin
PHONE
Farmers 44 - Red 1
Quality Courtesy Service
Oyen & Hastert
Cash Grocery
FEBRUARY 22-23-25
Virginia Sweet Pancake Flour, lg. pkg. 28c
Bulk Seedless Raisins, 3 for ..... 25c
Pears, lg. can, halves ..... 25c
Hard Water Castle Soap, 3 bars ... 25c
Soap Chips, lg. pkg. ..... 22c
Fresh Oysters—Fresh Fruits
Wisconsin Week
SALE
Cheese 29c
CORN, PEAS TOMATOES 3 for 29c
Premium Soda CRACKERS 32c
Pancake and Buckwheat Flour 28c
Thompson's Malted Milk Can 49c
Malt-Nut Flavored Malt Syrup Can 49c
Milk 3 Tall 28c
White House Milk 3 for 25c
Sauer Kraut 2 for 23c
Sugar 10-LB BAG $5.49
Flour 48-LB BAG $1.55
THE ATLANTIC & PACIFIC TEA CO.
MIDDLE WESTERN DIVISION
CHICAGO, ILL.
CITY BAKERY
Bread is your best food. Eat more of it.
Three Loaves of
Mother's Bread
For 25c
We also have all kinds of rolls, cookies, pies, fried cakes and doughnuts.
SPECIAL FOR LENT
Hot Cross Buns every Tuesday and Friday
OTTO MASSHARDT
Darlington, Wis.
GROCERIES
Better Quality
FRIDAY & SATURDAY, FEB. 22-23
Boneless Codfish, 1-lb. wood boxes ..... 29c
Pink Salmon, tall cans ..... 18c
Oil Sardines, 4 cans ..... 25c
Pancake Flour, Virginia Sweet, lg. pkg. 29c
Fresh shipment Fig Bars, 2 lbs. ..... 21c
Flour, Silk Finish, 49-lb. sack ..... $1.69
These prices are cash
H. D. Schreiter & Son
FISH for LENT
Bell 6 Farmers 82-Black
Quality Meats
and GROCERIES
AT RIGHT PRICES
J. J. McCarville

THE "HELTER-SKELTER" PLACEMENT OF ADVERTISEMENTS

To the reader this is "just a page of advertising."

be filled with state news. For special suburban editions, the state news can quickly be lifted out and news of suburban localities be played instead. When the time for the home edition arrives, this page provides a place for special display of local features.

6 THE NEW YORK TIMES, WEDNESDAY, DECEMBER 26, 1928.
NEW HOOVER PLAN SURPRISES CAPITAL
HOOVER RETURNING DIRECT TO CAPITAL
EXTRA SESSION A PROBLEM
Kurzman
January
Apparel
Clearances
BEGINNING TODAY
The remaining models from the early winter collections are presented at drastically lowered prices. Day and Evening Fashions.
DRESSES
formerly $55 to $75 - $25
formerly $65 to $125 - $45
formerly $95 to $145 - $65
COATS
formerly $145 to $225 - $95
formerly $175 to $325 - $145
formerly $225 to $345 - $175
HATS
formerly $15 to $35 - $5 - $10
Sports Dresses formerly $45 to $85 - $25
Sports Coats formerly $75 to $125 - $50
Sports Ensembles formerly $95 to $165 - $65
EVENING WRAPS—Reduced
Kurzman
Royal Headquarters for Liberty of London
McCutcheon's
5th Avenue at 49th Street
Telephone VANderbilt 3450
Clearance Sales!
Dresses and Coats For Women
SMART FROCKS of silk, wool and novelty materials. Street and sports styles. Reduced for immediate clearance.
$22.00 $32.00
SPORTS & TOWN COATS beautifully tailored from Scotch and English mixtures and fur-trimmed. Reduced to
$68.00
For Junior Misses and Children
DRESSES of silk or wool in school or afternoon models. Sizes for junior misses and children. Specially reduced.
$10.00 $15.00
JUNIOR misses' Coats, warmly interlined and many trimmed with fur. Exceptional values.
$35.00 $49.50
CHILDREN'S winter Coats, suitable for all occasions. Smartly tailored. Much reduced.
$15.00 $25.00
SECOND FLOOR
Stewart & Co.
fifth avenue at 37th street
Crepe Frocks Vivid In Red or Green
Are Worn by the Woman Who is Well-Dressed Over the Table
39.50
Every smart restaurant promises a gay scene these days when smart women throw back their dark coats... to reveal brightly hued frocks. For colourful frocks are so much more youthful than sombre tones... and the shades colours for everyone!
Jay-Thorpe
Coming South—
the very smartest new wraps are of
Draped Panne Velvet!
These are the lovely molten-looking wraps that made their success at Biarritz and were brought out in new designs at the Mid-season. Of course, these colors and floral draperies are for the South—but some of our customers are wearing them already—lemonsome ing to holiday parties in the lime-yellow and green and new "pearly pink" wraps of the coming resort season!
from 110.00
GOWNS Tappé HATS
12 West 49
January Clearance
Distinguished Modes
at drastic price concessions
Sports FROCKS Originally to $45.00 13.75
Sports COATS Originally to $65.00 33.75
Dinner & Evening GOWNS Originally to $85.00 28.75
Dress and Sports COATS Originally to $135.00 59.75
Every Hat in the Store 8.00
Originally to $18.00

THE ATTRACTIVE PYRAMID ARRANGEMENT OF ADVERTISING

Observe that, while this page has proportionately the same amount of advertising as the "helter-skelter" page shown opposite, its orderly arrangement permits an interesting display of news on the upper third of the page.

## PLACING THE ADVERTISING

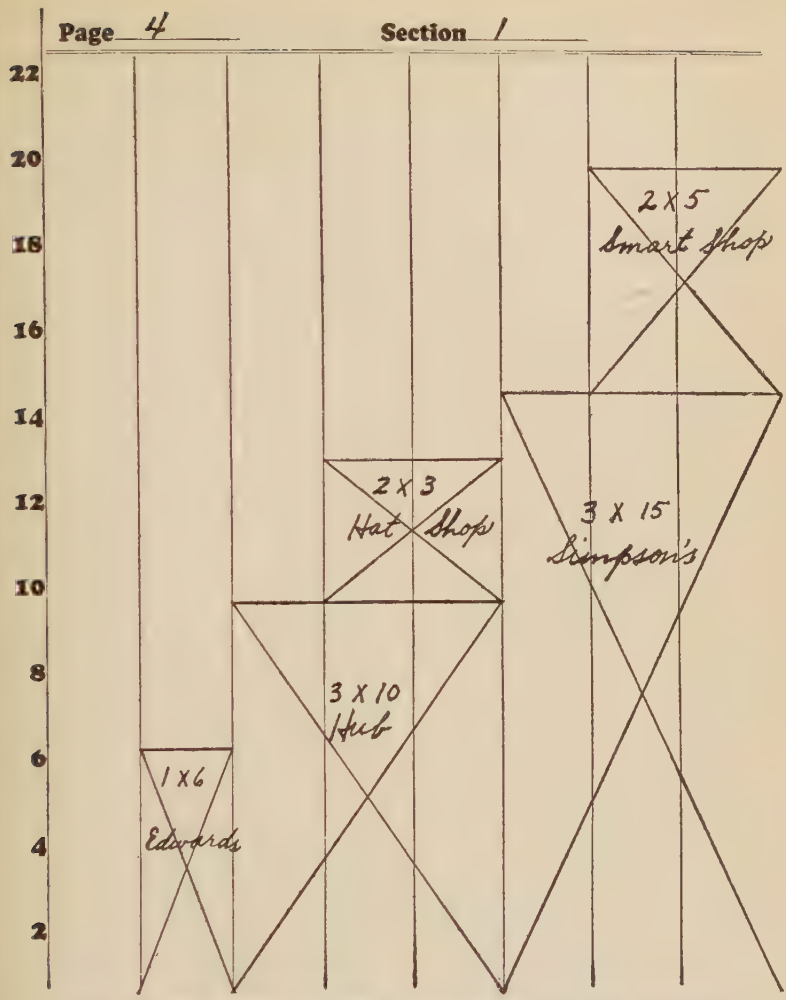
The first step in inside make-up is the placing of the advertising. Some papers crowd their advertising far back in the paper, leaving the first few pages free for news matter. Others carry

a fair amount on each page, spreading the advertising through the paper in order to give each advertiser a better opportunity to get next to reading matter. Some papers place all the ads in the right-hand columns of each page; others place their ads in the two outside columns on each side and leave the center free for news matter. A great many apparently have no plan, but dump their advertising helter-skelter, "pitchfork fashion" through the paper. Regular advertisers are given preferred positions at the tops of the pages, and news matter is run around and under the ads wherever it will fit. The helter-skelter placement of advertisements, it is obvious, can never make for interesting and attractive inside pages, as can be seen in the illustration on page 322.

The best arrangement is to build the ads up in the form of a half pyramid, stepping up gradually from the lower left-hand corner to the upper right. The larger advertisements go at the bottom and the smaller ones are built above them. Such an arrangement has distinct advantages in that it permits most of the ads to be placed next to reading matter. It leaves a triangle covering the whole left-hand top of the page for the display of news and pictures, and makes the most attractive page because it is so well ordered. In the carefully pyramided page, advertising and news are kept separate. No news is permitted to run under or to the right of an advertisement. The advantages of this style of advertising make-up can readily be seen by comparing the examples of helter-skelter and pyramid arrangement shown on preceding pages.

### LIMITING ADVERTISING DISPLAY

Quite a number of newspapers have taken a definite stand in limiting the typographic display of their advertisers. They do this because they feel that their papers will not have the pulling power if their inside pages are made ugly by the kind of overdisplay of black rules, black type, and black cuts usually found in the bargain type of advertisement. A newspaper can sell its advertising space only on the basis of the results it will produce. Hence, publishers feel they have a right to insist that advertisers conform to certain typographic standards in order




THE AD DISPATCHER'S DUMMY WHICH GOES TO THE FLOORMEN IN THE COMPOSING ROOM

that the general tone and attractiveness of their pages may not be spoiled. Some papers do not permit the use of heavy black Gothic types. Others go so far as to insist that any black masses in illustrations must be toned down with a Ben-Day process to give a gray instead of an all-black tone.

### SCHEDULING THE ADVERTISING

On smaller papers the work of making an advertising schedule is handled by the advertising manager. On larger papers this work is often delegated to a special executive called the advertising dispatcher. Each page is carefully dummied on small page layout sheets drawn to scale. The position and size of each advertisement is blocked out, and the name of the advertiser and the exact size is indicated within the space assigned. These dummies are sent out to the floormen in the composing room, who place the ads in the positions indicated. This arrangement of advertisements cannot ordinarily be changed to make the news fit in, for the advertising staff has often agreed with the advertisers as to just where their advertisements shall go.

Many advertisers have decided preferences as to position and insist on certain pages if they are to advertise at all. Banks and investment houses often prefer to have their advertisements placed on financial pages; women's specialty shops prefer positions on women's and society pages; tobacco and sporting goods advertisers prefer the sport pages. Often papers charge higher rates for preferred positions, such as on back pages or amusement pages. As far as possible, the advertising dispatcher tries to follow the preferences of his advertisers.

### THE IMPORTANCE OF INSIDE MAKE-UP

With the advertising in position, it then remains for the news staff to fill up the rest of the page. And the make-up of these inside pages is almost as important as that of the front page. Many editors pay a great deal of attention to the make-up of their show windows and then forget all about the inside of their paper, leaving that for printers to throw together. As a result, the inside of the paper looks dull and uninteresting. Such editors forget that they owe an obligation to their advertisers to make the inside pages interesting enough to attract readers. Of what value is a newspaper to advertisers, whom most papers keep off their front pages, if there is no inducement to the reader to go farther than the first page? To make its space worthwhile to the advertiser, a newspaper must lead its readers back into the pages that hold the advertising.

Large newspapers accumulate enough news in a day to be able to make every page interesting. If they fail, it is because they do not get enough variety and contrast with headlines, cuts, and boxes. Smaller papers sometimes have a hard time getting enough interesting news matter for the inside pages. Such stories as they put inside are captioned with small insignificant looking 12- and 14- point heads, and as a result all inside pages look dull and gray.

### A STARTER FOR EVERY PAGE

To catch the interest of the reader, every page needs some focal point on which the eye will center. We read naturally from left to right. As the average reader opens his paper, his eye travels to the top of the outer left-hand column—column 1. Right at the point at which the eye first strikes we need a good strong headline to catch the interest of the reader and start him into the page. Twelve- to 18-point heads are not large enough to serve as "interest starters," nor are they heavy enough to hold up the top of the page. It takes a 24- to 30-point head to serve that purpose. Metropolitan papers customarily start each inside page with a secondary head, reserving the larger top heads for the front page only. Weekly papers whose head schedules are more modest may find their secondary heads a little weak for "starters" and may use more successfully a good top head in column 1 of each inside page, following with secondaries in alternate columns.

Every paper, no matter how small, ought to be able to find at least one story to display under a fair sized head to start off each inside page. If nothing else, there is no reason why country correspondence letters cannot be displayed under regular news heads, based on the most important item in that week's letter, instead of appearing always under a small boxed label containing only the name of the town from which the correspondence comes. The name of the town readily can be incorporated in a news head, so that any particular correspondence letter can be as easily identified as if it were under the town label.

Many weeklies start each inside page with a two-column boxed head of the label type, covering country correspondence. Such heads do not ordinarily make good starters. Boxes do not look good in outside columns. Such pages would be much improved

NEW YORK HERALD TRIBUNE, THURSDAY, DECEMBER 10, 1931
Alcohol-Filled Compass Almost Seized by U. S.
Roosevelt Lets Moses Retire For Democrat
Influenza Gain Not Alarming, U. S. Counsels
Playthings from MAYFAIR
DANCING DOLLS
CHRISTMAS TREE ORNAMENTS
Shopper's Guide
Retail Headquarters for Liberty of London
McCutcheon's
5th Avenue at 49th Street
Telephone VANderbilt 3430
Handkerchiefs
for those last-minute gifts!
ON THE SECOND FLOOR you'll find the center of the Handkerchief Annex devoted to novelty Handkerchiefs. White or colored, printed or embroidered — dozens of different styles to give youngsters, in-betweens or grown-ups.
25¢-35¢-50¢-65¢ each
Christmas Gift Handkerchiefs for men and women
First and Second Floors
SIERN BROTHERS
Just Arrived!
IMPORTED FOLDING TABLES
With Mother-of-Pearl Inlay Base And Solid Brass Tray Top
17.50
Remarkably low priced
Browning King
World-Wide Communication
accuracy, speed
. . . . and MORE
Radio Corporation of America

BALANCED INSIDE PAGE MAKE-UP

if a good top or secondary news head were used in column 1 to start that page. Then a two-column box head can be used very nicely in columns 2 and 3.

### STYLES OF INSIDE MAKE-UP

In general there are two different styles of inside make-up. One is known as the "balanced" inside page. It employs a suc-

cession of strong heads of equal weight, usually secondaries, in alternate columns across the top of the page. Columns 1, 3, 5, and 7 thus balance each other. In between, boxes, cuts, or smaller heads are used for contrast. Many papers permit dead ends of type to turn up in these alternate columns. This practice is generally permitted where the page opening is small, due to a large amount of advertising. Two-column italic feature heads and larger cuts and layouts are frequently worked into this balanced page for the sake of greater variety.

The make-up of the *New York Herald Tribune* inside page, illustrated on the adjoining page, is as carefully planned as its front page and presents a most interesting and pleasing top-of-page balance.

A second style is known as the "descending order" make-up. A good strong lead story under a top or secondary news head is used in column 1 to start the page. A succession of smaller headlines in descending order of sizes is used to head the columns to the right, creating the effect of movement that leads the reader's eye into the page. This make-up can be varied by using two- or three-column cuts, boxes, and feature heads. The *Chicago Tribune* page shown on page 330 illustrates the descending order type of make-up.

Papers often use both systems, employing the balanced make-up on the more open pages where there is room enough to plan an interesting top-of-page balance, and reserve the descending order make-up for pages where the opening above the advertising is very small. Often there is room for little more than the one story that leads the page, if it runs to any length. Rather than run dead ends to the tops of all succeeding columns, it is well to work in, if possible, a cut or a box somewhere along the line to break up this dull succession of dead ends. The main story can be run around underneath such a box without interfering at all with its continuity.

### INSIDE LINES

Either of these two make-up plans can be used under a small streamer, ribbon, or blanket line across the top of inside pages. Some papers use inside lines on almost every page in order to dress up the inside of the paper.

CHICAGO DAILY TRIBUNE FRIDAY, FEBRUARY 15, 1929
"NO," ORMISTON REPLY TO SINGLE "AIMEE" QUERY
ROME FORBIDS PRIESTS TO JOIN ROTARY CLUBS
Called Anti-Catholic and Protestant.
WARNING ISSUED AS MORE BANKS IN INDIANA FAIL
SPECIAL!
Permanent Marcel Wave
$3
Loeber's
Out of respect to the memory of
MILTON H. WILSON
one of the founders of our business
we will be closed all day tomorrow
Saturday, February 16, 1929
WILSON-BROTHERS
It's FREE with next SUNDAY'S TRIBUNE
DIXIE MAY
"DIXIE MAY"
Music by Al Morey
Lyrics by George Zoblenus
Don't Miss This NEW SONG HIT
A SPECIAL SUPPLEMENT
Complete Words and Music In Rotogravure
On High Grade Paper Free with Next Sunday's
TRIBUNE
"I sure was right—
I lit a Lucky"
"So many people have made a fuss over me because in rowing back to the 'America,' after we had picked up the 'Florida' survivors, I was smoking a Lucky Strike. I can't see why there should be any excitement about it this—it was the natural thing for me to do. Before we started out from the 'America' I made sure that my pack of Luckies was with me—I wanted the comfort and pleasure of Luckies no matter what happened. I sure was right. I'll have to admit that after we picked up the 'Florida' crew and started back, my nerves were completely let down. So I did the thing I always do at such times—I lit a Lucky. As long as I live, I'll never get another kick as I did from the sweet old toasted flavor of that Lucky as we were tossing about on the old Atlantic. I'm a hundred percenter when it comes to 'reach for a Lucky instead of a sweet.' I lay off the things that would make me flabby and light up a Lucky instead. There's too much action going on in my life to have me moving around with a lot of excess weight which I don't need. There's another thing about Luckies. The toasting process, in removing the impurities, is a blessing to us who follow the sea. It prevents throat irritation which is a constant nuisance to those who are regularly exposed to salt air."
Aloys A. Wilson
Boatswain's Mate "U. S. America"
Reach for a Lucky instead of a sweet
LUCKY STRIKE
"IT'S TOASTED"
CIGARETTES
"It's toasted"
MARSHALL FIELD & COMPANY
Printpack Stationery
$1
500 sheets and 500 envelopes printed with your name and address
This personal stationery, which is used in every state in the United States and which has been shipped to almost every country in the world, gives you 500 right sheets and 500 envelopes all printed with your name and address for $1. If you don't know Printpack already you'll be delighted when you see how really good looking it is.
Printpack Guild
First Floor
North Wabash
New Comfort for Those Who Wear FALSE TEETH

DESCENDING ORDER MAKE-UP FOR INSIDE PAGES

A line adds interest and helps in the make-up of a page, but there is danger of overdoing display. Most stories have to be forced in order to play them with an eight-column ribbon, and their importance is emphasized out of all proportion to their news value. To avoid overemphasis many papers use much smaller type, usually not more than 36-point, for these inside lines. Frequently they are set in italic to make them appear less strong

and to give the impression that they are feature lines rather than news lines.

Inside lines perhaps are best used when the editor has a long inside story with a number of different angles, and perhaps also an art or picture layout, all of which can be tied together very effectively with a top ribbon.

Papers that strive for a medium position on this matter dress up only certain pages with inside lines. The third page, which is the first one the eye strikes as the paper is opened, is given a line playing some good local story with a picture layout. Society, music, drama, and magazine pages also are given ribbons that serve as labels for these departments. Most papers use lines on their sport pages.

### CUTS AND BOXES

There is probably no better way of brightening up inside pages than by the use of pictures. Daily papers which subscribe to syndicate services usually get more news picture mats than they can use each day. There is no reason why a bright spot of color in the form of a news picture or two could not be used on every page when space permits. There are, of course, many days when the paper is "tight," when the news space left above the advertising is so small that there is hardly room to get in all the necessary news matter. But when pages are open enough, the use of a cut or two will serve better than anything else to put life and color into inside pages.

The writer is inclined to disagree with those editors who maintain that pictures should be used only when they illustrate some story in the day's news. Local news pictures, of course, are always best. Timely pictures, related to telegraph or cable news of the day, rank next, but when these are not available there is no reason why pictures not immediately related to the spot news of the day, and yet of sufficient news or feature value to catch and hold the interest of the reader, should not be used to brighten up these inside pages.

Because of the pyramiding of the advertising, cuts on inside pages usually go to the top of the page. A rule on most papers is that cuts must never be placed next to advertising, but always must be separated by a column of text matter. Occasionally, when the page is fairly open and there is room for a two-column

# King Amanullah Loses in Campaign to Modernize Afghanistan

Rebels Force Reform Recall

Seclusion of Women Will Be Resumed Immediately

Kabler Delivering His Message

Interpret Pact, Reed Advise

End of League Warn Senate of Peace Perils—Dangers

This Is a Concrete Illustration

Women Voters Urged to Study

Must Assess to Test Laws

Decision Involves City in Technical Maze on Widening

High Court Will Hear Payne Case

Speaker Lauds Newspaper Ad

Congress Block Men Are Told of Way to Talk to Public

Husband's Friend Is Sued by Wife

Influence Denied by Mrs Sherman

Paraguay Blocks Peace, Is Claim

C. Edwin Search Dead in Florida

Furnace Overheated, Sets Fire to Residence

Pure and Fresh

All the fragrance of the tea-gardens comes to you in the sealed package of

"SALADA" TEA

AUTO SHOW

MILWAUKEE AUDITORIUM

JAN. 12th to 19th INCLUSIVE

Show Opens 1.30 p. m. on the 12th, 10.30 a. m. on All Other Days.

NEW SCENERY!
NEW LIGHTING!
NEW MODELS!



Edwin F. Kelly

This Thoroughly Trained Associate Dealer Can Give You Unusual Service

Wisconsin, 36th and Michigan Streets

EDWARDS MOTOR COMPANY

SMART BIRDS OF A FEATHER-

DIXIE FLYER ROUTE

C&EI — L&N — N C & St L

A PLEASING ARRANGEMENT OF PICTURES ON AN INSIDE PAGE

cut or more at the top, a single-column cut can be used at the bottom of column 2.

When a variety of cuts is not available, short boxed stories will serve quite as effectively to brighten up inside pages. Care should be taken, however, not to use too many boxed heads.

PAYS OWN WAY
JELLY QUEEN HERE TO FIGHT FOR SONS
ADD UP CLUES IN MYSTERY OF TORCH VICTIM
SHORTAGE SUICIDE 21 CENTS TO GOOD
360-85985 H
THE PUZZLE
DR. THOMAS F. WALSH
DAILY PICTORIAL
NEW YORK JOURNAL
GENERAL NEWS SECTION
NEW YORK, WEDNESDAY, FEBRUARY 27, 1929
JELLY QUEEN HERE TO FIGHT SUIT; HINTS PERURY
EX-WIFE WEDS; HUSBAND GETS SEPARATION
$20 'SHORTAGE' SUICIDE WAS 21¢ TO GOOD
WEDS MATE'S SLAYER
HOUSE FORCED TO VOTE ON DRY BILL
JEERS AT JELLY KING
'ARMY' COMMANDER
Seeks Decree
MARCH DIVORCE FOR MURIEL
FREDERICK LEDBETTER
BANK CASHIER GIVEN SIX YEARS IN PRISON
21ST BIRTHDAY MARKED BY FIFTH AVENUE GROUP

A JUMBLE OF PICTURES AND HEADLINES

LEADER PAGES

Because of the importance of pages 2 and 3, some newspapers schedule only a comparatively small amount of advertising on these pages and use them for a news display second only to the front page. From the standpoint of relative importance, page 3 probably comes next after page 1, because it is the one that

the eye first strikes as the page is opened. The larger stories and art layout, therefore, are frequently placed on this page. Streamer lines often are used at the tops of both of these pages, with interesting picture layouts below.

The result of this special make-up on the first two inside pages is a happy one, for it starts the reader into the paper. If, as he turns from the first page, he finds attractive looking pages inside that appear fully as interesting as the first, he will be more tempted to go on through the paper.

Some papers, however, are overdoing this display by making pages 2 and 3 a jumble of pictures and headlines. There is a limit to the number of pictures that can be used on any page. One good picture layout, with perhaps a smaller picture or two, is about all that any page can stand. When a half-dozen or more big pictures are crowded on a page in helter-skelter fashion amid a jumble of heads and stories, the result cannot help but be a confusing hodge-podge. The examples shown on the preceding pages offer a study in contrasts of inside display.

### THE EDITORIAL PAGE

Among the inside pages that needs special study there is none more important than the editorial page. Its contents and make-up are real problems to many editors.

A great deal has been written about the decline of the editorial page. The day of personal journalism, when such editorial giants as Greeley, Dana, Raymond, Watterson, and Bowles really led public opinion and exerted a tremendous influence on American life, has been succeeded by a new era of institutional journalism. The large capital necessary to finance a modern day newspaper and the tremendous costs of production involved have made necessary the entry of the corporation into the business of newspaper publishing. The editor-publisher has been replaced by a board of directors, and the work of writing editorials is turned over to a board of editorial writers. Thus it has come about that the voice of a great paper today is the voice of an institution rather than the voice of one man, and the editorials have come to concern themselves more with the interpretation of news than with thunderous editorial leadership, as was the case in the past.

AN ATTRACTIVE EDITORIAL PAGE MAKE-UP WITH SEVEN 14-EM COLUMNS

This does not mean that there are no great editorials written today. Our times are just as stirring and there are as many great public problems to solve as in any preceding period. Every day there are many well-written, powerful editorials to be found in American newspapers. In fact, good editorials are probably more numerous today than ever before.

The real difficulty lies in the scarcity of editorial readers. Editorials are not read because, in the rush to display news and advertising, the editorial page has been neglected. The editorials themselves are underdisplayed and look uninteresting—they have shrunk to a mere column or two, and the rest of the page has been made a dumping ground for features.

American people have developed into headline scanners. They take time to read only those stories whose heads tell them that below is something of definite interest to them. Most editorial pages look too solid, too uninteresting and forbidding. Editorials are not read because they do not attract readers.

An editorial cannot either be believed or acted upon until it has been seen and read. Better typography and more interesting make-up may not be the panacea for all the ills of this page, but they will go a long way toward emancipating the editorial.

Arthur Brisbane, the pioneer in the movement to popularize the editorial page, began by taking the editorials of the *New York Journal* out of their burying place on the inside of the paper and placing them on the back page. Then he set them in larger type, widened the columns, made his paragraphs extremely short, put ample leading between lines, and set words and sentences to be emphasized in caps or boldface.

Because of the many undesirable things about yellow journalism with which this type of page became associated, many papers have purposely kept to a most conservative make-up of the editorial page, maintaining that the thoughtful reader did not need to have his reading made easy or attractive. But of recent years an increasing number have begun to adopt at least some of the typographic devices with which Brisbane pointed the way. An analysis of the elements that go to make an editorial page interesting discloses what can be done with these devices.

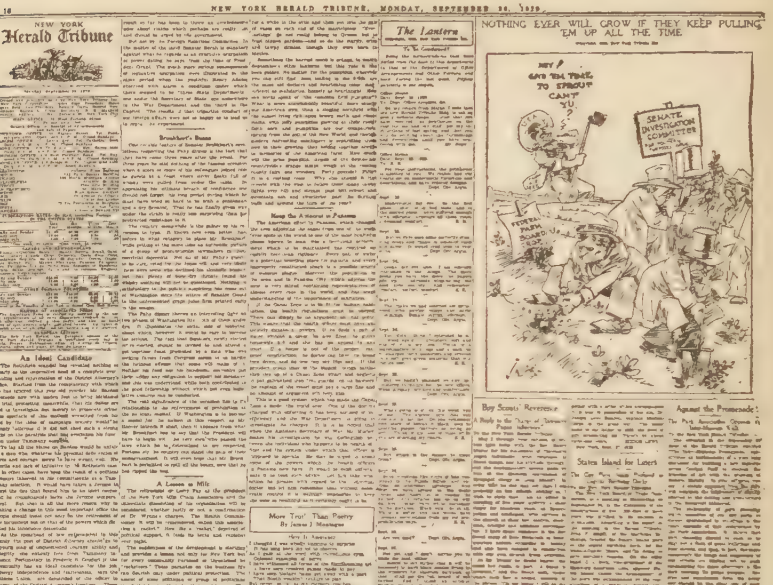
### WIDENING THE COLUMN

Even some of the most conservative papers have adopted the wider column for this page. It gives the page a different appearance from any of the news pages, sets it off, and makes it a little more distinctive. It also makes possible the use of larger and more readable type.

A BRIGHT AND INTERESTING EDITORIAL PAGE ILLUSTRATING THE USE OF SIX 16-EM COLUMNS

Furthermore, the wider column shortens each editorial and makes it look less long and forbidding. It leads the reader to visualize the whole editorial as of reasonable length rather than stretching on to a long thin column of solid type.

Now how wide should the editorial column be? Should it be



A POPULAR TYPE OF EDITORIAL PAGE MAKE-UP

Note the use of three 16½-em columns and four 12½-em columns.

a full two columns in width or somewhere in between one and two columns?

That depends entirely on the size of type used, or, conversely, the width of the column used should determine the size of type that must be employed. The pica width of a column should not be much more than twice the size of the type. Thus, if 8-point

type is used, the column should not be more than 18 cms wide. If the columns are double measure—25½ cms—it will be necessary to use 10- or 12-point type to get the maximum legibility.

### RAISING THE TYPE SIZE

The custom has been to set editorials the same size as the body type on the regular news pages. There is, however, a growing tendency to set the editorials in a larger type and to increase the amount of space between lines by ample leading. Many newspapers use 8-point type on a 9-point body in 16-em columns; many others have adopted 10-point type leaded, set in 18- to 20-em columns. Larger type and wider columns make editorial pages easier to read and much more attractive.

### EDITORIAL PAGE HEADINGS

It is always difficult to understand why the average editor, when he has some message that he particularly wants to get over to his readers, puts it under a little one-line label head that he would scorn to use over anything but the most insignificant news item. Headlines have been developed to help sell news, but why not use some of the art that has been learned in news head writing to help sell the newspaper's editorial ideas?

The average reader is a casual rather than a thoughtful reader. He determines from glancing at the headlines whether or not the article below is interesting enough to delve into further. If the head is attractive, he will read; otherwise he turns the page to something else.

It is not necessary to run scare heads on the editorial page, but it must be admitted that the limits of a little one-line cross-line are too narrow and severe to say anything really interesting. Why not use two or three lines, if necessary, to tell what needs to be said in order to arrest the attention of those whom the editor wishes to reach?

A number of papers are breaking away from the cross-line tradition and are using distinctive headlines for the editorial page to distinguish them from the regular news heads.

Since the top decks of most news heads are in the drop-line form, it seems better to adopt some other form of type arrange-

ment for the editorial head. The pyramid in two or three lines has been adopted by some papers. There are a number of ways of using it. Three lines of the same size, 14- or 18-point, ending in a single word, can be used as below:

What is Wrong with
Wisconsin Tax
Game?

Or the top line can be set in caps and the other two in upper and lower case in a smaller size, so that the head will appear to be two decks, though both together form a pyramid:

WHAT IS WRONG
with Wisconsin
tax game?

A little better legibility can be obtained if the top line is set in upper and lower case, but in larger type than the two lower lines.

Still a different device is to use the regular pyramid form instead of the inverted, usually in two lines, the first line consisting of but two or three words set in 18- or 24-point italic, and the second line in 10- or 12-point bold, explaining the caption, as below:

*Mellon, Butler, Hays!*
**America's Slackers in the Oil Probe**

The informal two- or three-part head, set flush to the left and permitted to run ragged at the right, would make a good editorial page heading:

RECALL MARINES
AND PUT THEM
IN CHICAGO

If this did not give the editor enough room to say what he wanted, he might supplement it with a second deck set flush to the right to make the two give the effect of a hanging indention, as does the *New York Telegraph* in its news heads:

RECALL MARINES
AND PUT THEM
IN CHICAGO

Underworld reign of terror needs policing more than Nicaragua.

The half-diamond indention, seldom used for news heads, has possibilities for the editorial page. Two top lines, for instance, can be set in larger type, and three tapering ones below in a smaller size:

RECALL MARINES FROM NICARAGUA
AND PLACE THEM IN CHICAGO

* * *

Underworld Reign of Terror in "Gangster Capital"
Needs Policing More Than Does Poor
Latin American "Gringo"

### BOXED HEADLINES

The boxed headline is becoming increasingly popular on American editorial pages. If simple and distinctive rules are used to frame boxes, a few such headings can do a great deal to brighten up the editorial columns and make them look more attractive. While single cross-lines are customarily used within these boxes, there is no reason why any of the headline forms suggested above would not lend themselves to a boxed headline. Care must be taken, however, not to overdo the use of boxes. The editorial page can be made to look just as cluttered up as any newspaper magazine page by using too many boxes.

In the choice of rules or borders with which to make editorial page boxed headings, it is well to avoid overornamentation. Borders that are too fancy detract from the dignity of the editorial page. Comparatively simple borders, which harmonize

with the tone of the type, are best. Boxes made from heavy black rules are neither decorative nor attractive. They make too rude a contrast to the rest of the page. They contribute nothing but blackness and only make the page spotty and hard to read.

### INITIAL LETTERS

Many editors use a two- or three-line initial letter to start each editorial. The plan is a good one, for the initial letter not only provides an eye-arresting spot, but it also carries with it a certain dignity that goes well on the editorial page.

Why would it not be a good plan to use additional initial letters, particularly in long editorials? There are many editorials that run one-half or three-quarters of a column in length. One seldom, if ever, sees anything like a subhead to break up that solid length of grayness. One or two initial letters placed at convenient divisions in thought down the column would do much to keep the long editorial from looking less forbidding, providing interest points to carry the reader through the editorial.

### A DIFFERENT TYPE FACE

Many newspapers use distinctive headline faces for their women's, magazine, and sport pages. Why not carry this idea over to the editorial page as well? The regular news headline faces used by most newspapers are quite ugly and cheap looking. Why not adopt for editorial page headlines type faces that will give character and dignity to the page and at the same time set it off from the regular news pages?

One of the handtooled faces would make editorial headings of real distinction. There are Narciss, Goudy Handtooled, Cloister Tooled, Graveure, Ludlow Cameo, and La Mercure to choose from. Many newspaper composing rooms have had to add one of these to meet the demands of advertisers for a high quality face, so they may readily be available. If not, a job font will take care of any day's editorial headings. Handtooled faces should not be used for heads less than 14-point in size, for the fine tooled lines tend to fill up with ink on long press runs, particularly when printing on newsprint paper.

If a little more color is desired, any one of the Classic group of faces would do well. Cloister, Garamond, or Goudy would

THE MILWAUKEE JOURNAL
A Graphic Record of Half Century of American Life in Currier & Ives' Prints
Famous Lithographing Firm Filled Pictorial Journalism Needs of the Day Long Before the Era of Photo-Engraving, Rotogravure and News Photographs
We'll Say So
Badger Folks and Foibles
That Body of Yours
Glimpses of an Earlier Milwaukee
Around the World With a Journalist Man
Mr Coolidge Has Lost One Reader
The Streets of Cairo
A Playwright's Trick to Fill the House
Venezuela Spurns the Talkie Films
Land Consolidation Hearing
Congress to Recess
The Observer
More Federal Prisons Needed
Noah's Ark
The Forms of the Road
Stemming the Cattle at 1867

WIDE COLUMNS AT EACH SIDE FRAMING THE FOUR NARROW COLUMNS IN THE CENTER

contribute both character and interest to any editorial page. Caslon Oldstyle or even Caslon Bold, by their inherent qualities of dignity and straightforward simplicity, demand consideration for editorial page headlines. Another possibility is Benedictine

or its companion Benedictine Book, both recently revived by the linotype company. Their hand-wrought character, originality, and beauty would give distinction to any page. Pabst Oldstyle and Packard have been adopted by some newspapers for their editorial pages. The rugged and antique lines of these faces produce headlines of unusual interest.

### EDITORIAL PAGE MAKE-UP

Editorials rarely exceed two or three columns in most modern newspapers. Few people will read more. The rest of the page is filled with a variety of features and departments. Their introduction on the editorial page came about through an attempt to provide some sugar coating for the heavier editorial matter. It is obvious that neither news nor advertising have any place on this page. Instead, the page has been made a combined editorial and magazine page. With the solid food for thought there is mixed a little entertainment and a bit of education and culture. To supplement the editorials there have been added cartoons, communications from readers, verse, humor columns, short stories, health departments, question and answer columns, book reviews, reprints of editorials from other papers, historical sketches, and a wide variety of other features.

Too often the page has been made a dumping ground for fillers—worthless features for which there was no room elsewhere in the paper—and too often they have made of the editorial page a deadwood section. But wide-awake editors have demonstrated that a wise choice of features to accompany their editorials can make this page one of the most interesting and readable in the whole paper.

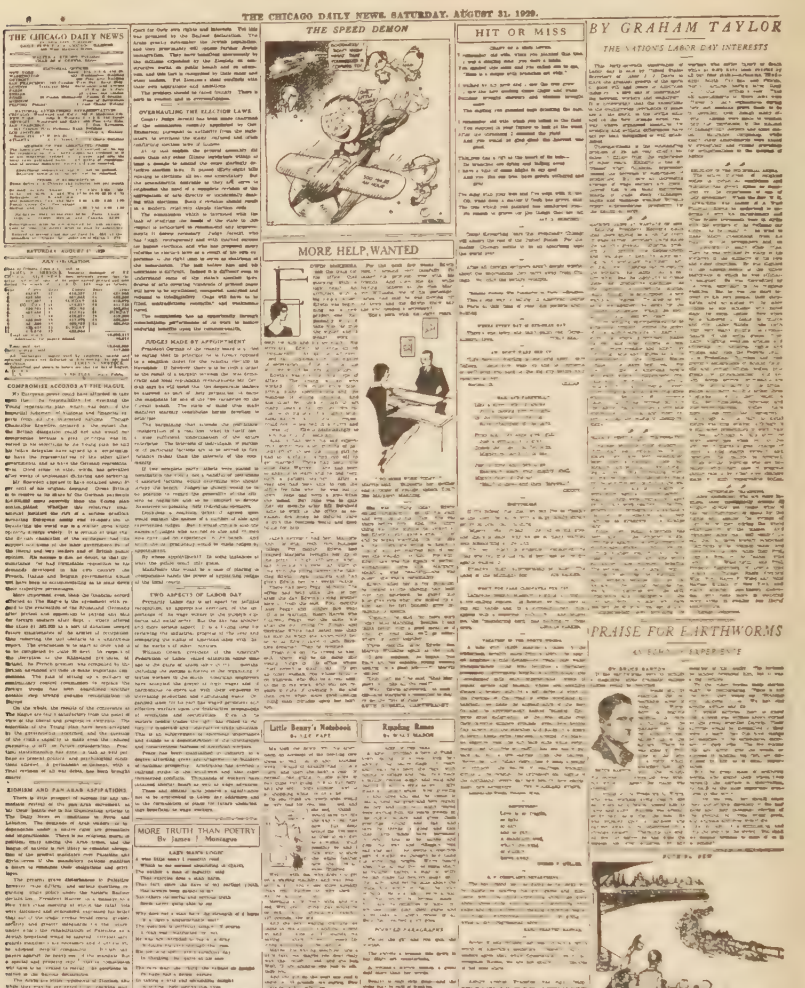
The use of these varied features has created a special problem in make-up. If wider columns are adopted, shall they be reserved for the editorials alone, or shall the whole page be set in wider columns? This question has been answered in two different styles of make-up.

The papers which set all matter on the page in the wider column customarily have six columns of equal width, usually 16 ems. The editorial matter is often distinguished from the feature matter by setting it in larger type than the rest of the page or by the use of different sets of headings. Some papers, for

ILLUSTRATING THE USE OF TWO WIDE 18-EM COLUMNS FOR EDITORIALS AND FIVE NARROW COLUMNS TO THE RIGHT FOR FEATURE MATTER

instance, used boxed heads for all features on the page and unboxed heads for the editorials.

A few papers set the editorials in 16- to 18-em measure and the rest of the page in 12½-em widths.




THE CHICAGO DAILY NEWS EDITORIAL PAGE IS DIFFERENT. IT USES A 16-EM COLUMN BETWEEN TWO PAIRS OF NARROW COLUMNS

Such a plan is often easier because if feature matter comes in mat form it is usually in 12½-em measure. Cartoons ordinarily come in three-column measure. They would fit easily into the narrower columns of a make-up such as the one above, but if set in a page using only the wide measure columns they would

have to be framed with a good deal of white space on either side.

For the sake of symmetry, some papers set the two outside columns in wide measure and use the narrower columns in the center for features.

Either of the above plans involves, of course, the nice problem of making the matter that is set in either measure come out exactly at the bottom of the column, for it is obvious that narrow measure type cannot be run over into a wide measure column or vice versa.

### OTHER SPECIAL PAGES

While there has been a change from the old newspaper policy of grouping various kinds of news into strict departments, there is nevertheless an attempt made on most papers to create special pages or sections that will appeal to different groups of readers. For the newspaper publisher, such a plan has an advantage in that it enables him to build up a definite following for these pages which can be offered to the advertiser as a specialized market to be reached by buying space in them.

### THE SPORT SECTION

One of the best developed departments is the sport section. On larger papers it is put out by a special staff. Most papers give it a fixed position. A few feature it by giving it the front page of the second section and perhaps one or two of the succeeding pages. Others give it a double page spread near the back of the paper. One eastern paper gives it the double spread just inside its last page, so that it always can be quickly found by sport followers. During the summer months many papers put out a special four-page section on pink, peach, or green paper, so that it can be readily separated from the rest of the paper by those who want the sport section first.

Make-up on sport pages calls for larger display than on other inside pages. Top-of-page streamers are the rule on many sport pages. Big picture layouts, many line cuts, and heavy two- and three-column spread heads make a flashier appearance. Specially illustrated hand-drawn heads are used over separate sport departments and feature columns. The tendency is to make sport

pages as bright, breezy, and interesting as possible. Some papers use a comic strip across the top of every sport page, but sport pictures are probably of greater value.

### WOMEN'S PAGES

The discovery on the part of newspaper publishers that women do most of the purchasing in the American family and therefore form the greatest market of potential buyers that the newspaper can offer to its advertisers has led many to develop special women's pages, home and magazine pages, society and club pages in order to make a special appeal to women readers.

Too many women's pages still look like a hodge-podge. Their make-up, as a rule, is dull and uninteresting because it usually consists of a jumble of standing department heads. Interesting headline spreads that say something should take the place of the collection of boxed labels that now adorn these pages. More careful attention to picture layouts and an orderly arrangement of material will improve such pages immeasurably.

If there is any one page in the paper that should be typographically artistic, it is the women's page. It can be made so by paying careful attention to its make-up and by giving it a type dress that is feminine and appealing. A number of papers are achieving this by using Garamond, Caslon, or Kennerly for all headlines on women's and society pages in order to give them a distinctive and artistic character.

Papers that feature society news usually maintain it in a fixed position and under a prominent department heading every day. Or they may develop one story as a leader each day and announce it in a small ribbon across the top of the page. Whether or not a ribbon is used, it is customary to play up one or two stories every day under major heads, and then let the rest of the items follow under distinguishing subheads. Many papers use these subheads for only the larger items, and separate smaller items by asterisks or 3-em dashes. Little boxed headings to classify certain kinds of items such as engagements or weddings can be used to brighten up the page. Pictures offer the best means of putting color into such a page. If a paper cannot afford cuts of local people every day, syndicate pictures of national leaders in society or in women's activities can be used.

## CONCLUSION

Newspaper make-up involves not only the problem of getting reader attention, but also that of satisfying reader demands.

Editors and publishers everywhere are giving careful study to this matter of finding the most effective way of appealing to reader interest. Researches by individual newspapers and by students of journalism are providing interesting cross sections of reader reactions not only to the kinds of news and features that are most worthwhile, but to the manner in which they are presented and displayed. Pictures are becoming more than ever a part of the news story. New types of display are being experimented with. The success of the tabloid newspapers in recent years has raised in the minds of many the question as to whether the present form and size of newspaper is best. Many careful students declare that the modern large sheet paper will have to give way to a smaller, more convenient size.

Out of all this questioning, study, and experiment there will come a more worthwhile, more interesting, and more attractive newspaper. Already many time-worn traditions are being discarded. The newspaper of tomorrow will be a better newspaper.

## SUGGESTIONS FOR THE STUDENT

A good deal of excellent practice can be had by remaking newspaper pages with shears and paste-pot. Newspapers can be cut up into stories, reduced to galley form, and made up anew in various ways.

### *Exercise 1*

Buy three copies of the local paper and clip out all front-page stories and headlines. Then, using this material, design three new front pages representing the styles of make-up which the local paper does not ordinarily use. Thus, if the newspaper usually employs a broken page make-up, try designing balanced, contrast and balance, and brace make-ups with the same news material, redesigning and rewriting headlines where necessary.

### *Exercise 2*

Select country weeklies or small town dailies which show marked weaknesses in make-up and use of headline forms. Clip and reduce the stories of each front page to galley form. Then redesign these pages to improve their make-up, pasting the stories in their proper positions and writing new headlines where necessary.

*Exercise 3*

Select the final edition of the local paper and assume that a big story breaks just as the paper has gone to press. Clip all the front page material and redesign the page to get the new story in for the replate edition.

*Exercise 4*

Clip all editorial page matter from several newspapers circulating in your territory. Then design and paste up the best possible editorial page that can be made up from this material.

*Exercise 5*

Other special department pages, such as sports, home and magazine pages, society, women's clubs, markets, and radio pages can be redesigned in the same fashion.

*Exercise 6*

Clip all news stories from the inside pages of one section of some paper. Clip and separate all the advertisements in the same section. With the advertisements all in a pile, let part of the class act as advertising dispatchers to schedule the advertising in pyramid make-up for all of the inside pages of the section, preparing dummies to show where the different advertisements are to go. Then let the other half of the class paste up the advertisements in the positions called for on the dummies and redesign the news material to fit the space above the advertising, at the same time trying to create more interesting inside pages.

If a type laboratory is available, this work may be supplemented by the actual make-up of type page forms on the stone as described in the exercises at the end of the next chapter.

Study current issues of some of the best newspapers and observe carefully their practice in regard to the various points in make-up described in this chapter.

*Exercise 7*

Clip all the illustrations from one issue of a newspaper. Mount cutlines and pictures on separate sheets. Prepare proper instructions with each picture to be sent to the engraver. Then, treating the cutlines as copy, write the proper specifications so that when they arrive in the composing room they will be set up in the right size and measure to go with the cuts.

## CHAPTER XI

### THE MECHANICAL PROBLEMS OF MAKE-UP

WHILE the planning of news display and the making of page dummies may be an editorial problem, it is well for every editor who has anything to do with make-up also to have an understanding of the mechanical problems involved in translating the dummies into type pages.

The editor who knows the possibilities and limitations of his type pages will get much better coöperation from his printers. He will not be demanding impossibilities, and he will be able to plan his pages so that they can be put together with the greatest economy of time and effort. Seconds count when successive editions are being rushed to press.

To understand exactly how newspaper make-up proceeds, it will be well to go back to the point at which the news stories first enter the composing room, after having been properly edited and headed on the copy desk in the editorial room.

#### THE WORK OF THE COPY CUTTER

On small newspapers, copy may go direct to the linotype operator, or if there are several operators it may go to the foreman of the composing room, who passes it out to the different machines. On larger papers, the copy is shot down a pneumatic tube to the desk of a special composing room executive called the *copy cutter,* who is in charge of the routing of all copy. This man first separates the headline from the story, and then, if the story is long and may be needed in a hurry, he may divide it into several *takes* to be passed out among different operators. Three operators working on different sections of the same story can set it in one-third the time that it would take one operator to set the whole thing.

Each piece of copy comes from the copy desk slugged with its proper guideline, but as an extra precaution and in order to

make sure that all the separate takes will be assembled together, the copy cutter gives to each story an identifying letter. By consulting his record, he may see that the previous story has been marked E. The new story is then marked F, and the separate takes are numbered serially F-1, F-2, F-3, and so on. Each linotype operator who receives a take of this story sets up first the copy desk guideline and the identifying letter and serial number, so that the first slug, for instance, might read (F-1—Fire). All the takes then can be assembled quickly in their proper order in Galley F on the *dump*.

The headline usually goes to a special display linotype machine. A multiple magazine linotype or intertype is able to set both headlines and body type by merely bringing different magazines into play. But the change involves also adjusting the size of the mold in the casting wheel for each different size, and on larger papers, where there are a great number of headlines and a great deal of advertising display matter to be set in a day in addition to the body type, it would take too much time to make these adjustments back and forth. Hence, certain machines are set aside for straight news composition, and others work only on headlines and advertising display. In this way, maximum speed in production is attained.

### ASSEMBLING STORIES IN TYPE

As the different linotype operators complete their sections, they carry the linotype matter that they have set to the dump, a steel- or stone-topped table where all stories are assembled. On larger newspapers there is usually one man working at this dump or assembling bank all the time. On smaller papers the proof boy may do this work. The separate sections of each story are assembled in long galleys in their proper order, and as soon as the headline comes up it is placed at the head of the galley, which is then turned over to the proof boy who runs off three or four proofs. One of these proofs goes to the proofreading room, a second goes back to the copy desk to be available for any inserts, new leads, or other changes that may have to be made; a third goes to the news editor, who plans the make-up, and if there is a special make-up editor working in the composing room, he also gets a proof. Some papers take a fifth proof,

which goes to the managing editor so that he may keep track of all material going into the paper.

These proofs are shot away in pneumatic tubes, the one for the proofreaders carrying with it the original copy to check by. The proofreaders make their corrections and send the proof back to the copy cutter, who turns it over to the operator in whose work the mistakes occurred. He quickly recasts new lines for the faulty ones and carries them with the proof to the dump, where the assembler pulls out the faulty slugs and slips new ones in their places. Revised proofs are then taken, and when these have been read and corrected the story is ready for the paper, unless additions or changes have come from the copy desk. If there is "more to come" on a story, the printer turns the end slug upside down and holds the galley until the story is complete. If there are inserts to be made, the printer turns up a rule to mark the point at which the insert matter is to go, which is indicated on the proof by the news editor. When this comes up, he has only to slip in the slug lines and close up the rest of the type matter. When the bank man has completely assembled the story, he clears it to a second bank, where it is ready for the make-up men.

### THE NEWS CHASE

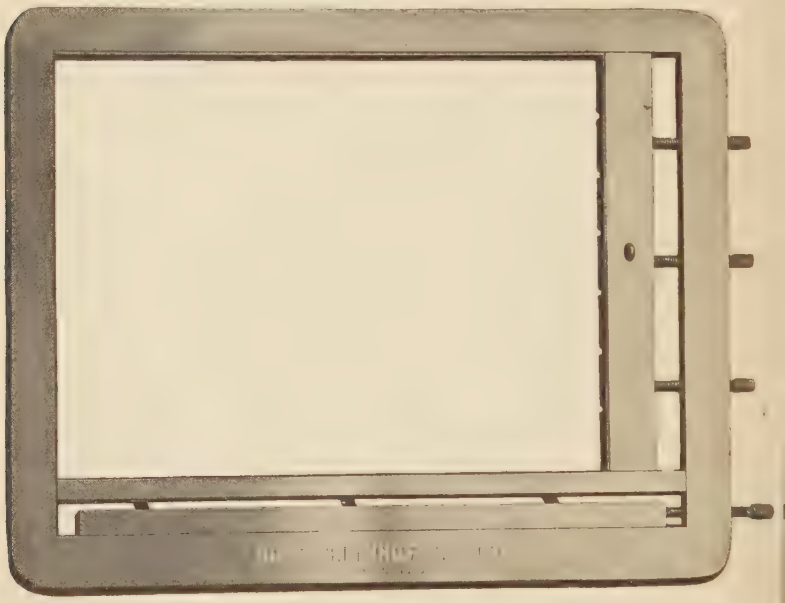
The news make-up men make up their pages on steel trucks, each large enough to hold one news chase. This news chase is different from the ordinary job or book chase. It is large enough to hold a full newspaper page and is equipped with quoin bars at the bottom and at the right-hand side with which the type page can be quickly tightened. The one at the bottom is a straight crossbar which serves as a base for the type page. It slides in grooves at each end, and two turn-screws at the bottom of the chase push this bar up against the type form, tightening it from the bottom. The inner of the two quoin bars at the right has a straight edge that serves to bound the right side of the type form, but its outer edge is cut in a series of wedges like the halves of quoins. Matching these is another series on the inner edge of its companion bar. A turn-screw at the bottom pushes these two sets of wedges against each other, thus tightening the form.

The space left between the quoin bars and the other two sides

of the chase is exactly the dimension of the newspaper type page, so that the make-up man does not have to bother about measuring his form, but can start building against the bottom crossbar.

### MAKING UP AN INSIDE PAGE

For each inside page on which advertising is to appear, the advertising manager or advertising dispatcher has furnished



QUICK LOCKING CHASE

a dummy to show what ads are scheduled and how they are to be arranged. From the *ad alley* bank, where the different ads have been assembled, the floorman in charge of make-up gets the ads for the page that he is working on and slides them from their galleys into the position in the chase for which they are scheduled.

The largest ad is usually placed in the lower left-hand corner of the page, as the keystone of the advertising pyramid. Against this he builds the rest of the pyramid. First he builds out along the base of the page toward the right-hand side. Usually a small one- or two-column ad goes into the lower right-hand corner. On

this foundation he builds upward, stepping up column by column toward the upper left-hand corner to form the hypotenuse of the advertising triangle. Column rules separate the ads vertically, and cut-off rules separate them horizontally, but instead of placing the ad borders against these rules, a line of slugs is placed between in order to set off each ad with a little white space. Two-line cut-off rules are placed above all the ads which appear next to reading matter in order to separate them from the text.

### FILLING IN THE NEWS

The make-up man is now ready to fill the rest of the page with news matter. In making up special department pages, he works from dummies furnished by department editors, but with other inside news pages there is usually not time on a metropolitan daily to dummy pages between editions. Instead, the make-up editor works opposite the make-up man and tells him what stories to use and where to place them.

Tight against the edge of the chase nearest to him—the top of the page—the make-up man places the running head, giving the name of the paper, the date, and the page number. Below it and across the eight columns he places a two-line rule to separate the running head from the rest of the page.

On an empty truck next to the one on which the page is being built, the make-up editor meanwhile has had placed the galleys holding the stories that he wants in the page. This time the make-up man starts in the upper right-hand corner and places in the first column the headline for the story that is to lead the page. First tucking a 6-point slug between the top of the head and the cut-off rule above, in order to avoid the appearance of crowding, he pushes the head tight against the top. Below it he quickly places the linotype matter for the story itself. But there must be a bit of white space between head and story, so he drops in a slug or two cut to exact column width. Practice varies among papers. Some require a 3-em or a 6-em dash between story and head, in which event the dash is set off by a slug on either side.

This first story may fill the entire first column down to the cut-off rule on top of the ad at the bottom of the column. But usually it does not—there may be a hole left, which he will have

to fill up later. Along the left-hand side of this first-column story he quickly slaps in a column rule reaching from the top of the page down to the cut-off rule over the ad below.

### HANDLING A TWO-COLUMN STORY

In the next two columns the make-up editor perhaps calls for a two-column feature story. The head goes in across the top of the two columns, with only a slug between it and the top cut-off rule. Then the head is set off from the story with a slug and perhaps a dash centered over the two columns. Next the story goes in, and of course it must be doubled up under its two-column head. The make-up man divides the type matter in half, trying to get as nearly as possible the same number of slug lines in each column. When this is not possible he fills out the extra space in the short column with leads between the lines of the first paragraph. The story, as now doubled up, probably reaches some four or five inches deep. Between these two short columns the make-up man slips a column rule, cut to fit exactly the space from the top of the first line to the bottom of the last one. Then across the bottom of the story he places a two-column cut-off rule.

Below this cut-off in the second column the make-up editor calls for a smaller single-column head and story. This fills out the second column and turns an extra paragraph or two up as a dead end in column 3. There is a little space left at the top of the ad below column 3, and the make-up man leaves it as a hole to come back to later. Proper lengths of column rule are slapped in to separate columns 2, 3, and 4.

### FINISHING UP THE TOP

Only three columns remain to be filled, for the advertising has come up to the top in the last two columns. The make-up editor has a story ready that looks as if it would almost fill out the rest of the page. It carries another major head like that in the first column to give the page a sense of balance, and this head goes in first at the top of column 4. The type matter follows to fill what space remains in this column and more. The make-up man slips in rules to separate columns 4, 5, and 6, and then

NEW YORK HERALD TRIBUNE, WEDNESDAY, MARCH 12, 1930
Income Taxes Due in 3 Days, U. S. Reminds
Taft Misquoted Oath, He Tells Girl; Doesn't Recall Saying 'Defend'
Mr. Hoover Fills Two Assistant Posts in Cabinet
Option to Buy Goes With Long Rental on 8th Ave.
Columbia Gets $24,533 From Twenty Donors
SAKS-34 STREET
At Broadway
MEN'S "LLANGORA"
TOPCOATS
An All-Weather Spring Fabric, combining Mohair, Cashmere, Alpaca and Wool
$50
Best & Co.
And Now Best's Famous "Petite Petiots" Come in PINK!
Pretty Girl Tells How She Breaks Up Heart Cards
PINKHAM'S PHENRIN
FOX SCARFS $15
SPRING COATS $15
FUR COATS $45
BENSON'S
BONWIT TELLER
FIFTH AVENUE AT 34TH STREET
Brilliance in Color Marks the New Evening Wraps for Misses . . .
98.00 to 695.00

THE NEWSPAPER PAGE AS IT LOOKS WHEN THE MAKE-UP MEN HAVE FINISHED BUILDING IT

Check each step of the explanation of inside page make-up, pages 354 to 360, with this illustration so that the mechanical details will be clear.

carries the rest of the story over as dead ends in columns 5 and 6. But rather than permit two dead ends together at the top of the page, he finds a little two-inch story under a small head to place at the top of column 6, slaps a cut-off rule under it,

and turns the run-over of the longer story underneath to fill what space remains in that column.

### HANDLING BREAK-OVERS

Great care must be exercised in breaking a story from one column to the next, so that it may be easy for the reader to follow. Some smaller papers break stories from the bottom of one column to a position somewhere near the bottom of the next under a cut-off rule. The reader naturally expects the break-over to go to the top of the next column, and it is very confusing to have to hunt for the continuation of the story somewhere down in the column. Break-overs should always go at the top of the next column, unless that position is occupied by a cut or a box, in which event the story should be broken under that unit. If the cut is related to the story, the break-over can follow under the cut without being separated by a cut-off rule, but if the cut is not related it should, of course, be properly separated.

It is also well not to carry over the last line of a paragraph to the top of the next column. It will look lost and out of place. Neither is it a good plan to break between paragraphs, for that will give the impression that the story is complete with the paragraph that ended the column. Instead, it is better to break in the middle of a paragraph and, if possible, in the middle of a sentence, so that the reader, in order to complete the sense, must look on into the next column for the rest of the story.

### FILLING IN THE HOLES

The page is now almost complete except for a few holes that remain. The make-up editor has ready a few short stories under small heads, and the printer drops them into the holes where they look as if they would fit best. Each story is separated from the one above it by a dash.

Filling the holes is not always an easy task. Often there is a great scurrying around in composing rooms in an effort to find "shorts" to fill holes. The copy desk editors can be of great help to the make-up men if they supply plenty of short stuff, little half-inch to two-inch stories under small heads. If there are plenty of these available, it is usually possible to turn out a

good looking page without too much leading. In addition to shorts, some papers permit the use of one- or two-line fillers promoting want ads or other features of the paper.

### LEADING OUT

The columns are full now, but they are not tight. The make-up man gives the turn-screw on the quoin bars a slight twist, then starts leading out each column to make it fit tightly. Brass leads of the exact width of the column are used, for they are not bent or damaged as easily as the lead ones. Usually the make-up man starts by putting extra leads between the different stories in the column. If this is not enough, he may be able to add a few between the lines or decks of the headline without making it too noticeable. If still more space needs to be taken up, he slips extra leads above and below each subhead and perhaps between paragraphs. As a final step he may start leading out the story itself, beginning with the lead paragraph and placing a lead between each line. This has the advantage of getting more white space in the first paragraph, which makes it easier to read and thus draws the reader's attention down into the story.

### THE FINAL CHECK

Before finally tightening the form, the make-up man takes his block planer and quickly levels the surface of the page so that no lines will be sticking up higher than others. Then he and the make-up editor together rapidly check over the page, column by column, to see that all details are right and that no glaring errors have slipped in.

Since the make-up editor usually works across the chase from the printer, he must be able to read type not only upside down, as the printer does, but also right side up and backwards from right to left. Late corrections, which have been rushed into their stories without being proofread, show up brightly against the other linotype matter and can be quickly detected. These slug lines should be read carefully to make sure that they do not contain any new errors. Heads must be checked with stories to make sure that each story carries its own headline. Ridiculous errors occur when headlines get mixed. Cuts must be checked

with cutlines to be sure that they go together. Sometimes the printer forgets to remove the slugline when he places a story in its column, and this would appear above the story unless caught in the final check. In breaking stories from one column to the next, subheads frequently appear near the bottom or the top of a column. Any subhead within an inch of the break usually is removed.

While the make-up editor is checking these details, the printer is busy checking typographic odds and ends. For one thing, dashes have to be looked after. Almost every paper has two kinds, the short 2- to 3-em jim or dinky dashes, which go between decks in headlines and between heads and stories, and the longer 5- to 6-em end dashes, which go only at the ends of stories. End dashes have a great habit of getting in where jim dashes belong, and often two dashes get in together. End dashes often are left at the bottom of columns, where they have no business to be, or above the cut-off rule that divides the news from the advertising below, where they are unnecessary. Then rules must be checked. Sometimes column rules are scant or too long. Sometimes rules slip in to cut off banner heads from the stories to which they belong, or they get left out of places where they are needed to cut off heads from stories to which the heads do not apply. Two-line rules, which usually consist of an upper heavy line and a thinner line below, frequently get in upside down. Cut-off rules between advertisements or between news and advertising have to be checked to see that none are omitted. All boxes must be looked over carefully to be sure they fit at the corners.[1]

There are many such details that the make-up men must check before they let any page go. With practice, they become very skilled in catching these errors and can make their check in a few moments.

### LOCKING THE FORM

When everything seems to be right, the make-up man tests each column to make sure that it is tight, slips in a lead or two where there is any looseness, then quickly turns the quoin bar screws at the bottom of the chase, and the form is locked.

[1] Eric W. Allen, *Printing for the Journalist*, p. 76.

Every slug and every little piece of metal must fit together so perfectly that when the form is locked it can be lifted as one piece without even a tiny space falling out. Only on smaller papers, however, which print direct from the type on flat bed presses, do the page forms have to be carried. On larger papers, which print from stereotype plates, the trucks on which newspaper page forms are made up are mounted on wheels so that they can be rolled right to the stereotyping table. The top surface of the truck exactly meets the top surface of this table, and the page form can be pushed from one to the other without lifting. From there we shall follow the page form through the next step in newspaper production in the next chapter, but now we shall return to the composing room where other pages are in the process of being made up.

### THE FINAL PAGES

Starting from the back of the paper, the make-up editor and the printers working with him have been getting the inside pages away as fast as possible, filling them up with all the news and feature material that the news editor has not reserved for page 1. Since practically all the type matter is in linotype slugs, pages can be made up with great rapidity. Once the ads are placed, a good make-up man usually can throw in the news and feature material above the advertising and close up the page form in a very few minutes.

The first page and one or two of the inside pages are held open until about ten minutes before press time. On many papers, either pages 2 and 3 or 3 and 4 are held to take care of the overflow from page 1. As soon as the make-up editor learns definitely what stories are to be held for the front page, he fills up one of the remaining inside pages and sends it away. The final inside page is held until the make-up of page 1 is far enough along so that it can be determined how much space must be saved for jumps or break-overs from the first page.

About six or seven minutes before press time the news editor sends down his front page dummy. The make-up man, in the meantime, has done as much as possible to be in readiness against the last minute rush. The paper's nameplate is in place against the edge of the chase at the top of the page. The "ears" have been set in on either side, and the dateline put in below. The

two-line cut-off rule across the top of the eight columns is also in place, so that all will be ready for the banner head and the top heads that are to be placed immediately underneath. If there is a daily cartoon, that also has been put in its usual position and column rules set in to flank it on either side. All of the page 1 stories are assembled in galleys ready to dump into the page.

### MAKE-UP PROBLEMS

Despite the speed with which the first page must be made up, it is the page that requires more care than any other, for it is the show window of the paper. While the make-up editor follows the news editor's dummy in arranging the display of the major stories, he always has to exercise his ingenuity to make the page look right.

Perhaps the story marked for a certain position has run much longer than the news editor estimated. The make-up editor must make up his mind immediately whether to throw away the last paragraph or two or to break the story over to another page. In the next column perhaps a story has proved shorter than was indicated in the dummy, and as a result two heads in the adjoining columns below come together awkwardly and must be shifted. At the bottom of the page a feature story under a two-column head is called for. The stories just above in those two columns must be squared off evenly to the cut-off rule over the two-column head. In the one column the story fits. In the other it is too short, and the make-up editor either has to find a little filler to go into that space or cut off the last paragraph of the story above so that a short can go in. Usually the news editors slug only the major stories on the first page dummy, in order to give the make-up editor some leeway in the rest of the page to make it come out right.

The make-up editor's decision must be made instantly. He has no time to try this or that. He has only a few minutes to make up an entire front page. He must not delay the closing of the forms even a minute. The last mechanical steps in stereotyping and locking the plates on the press are figured in seconds. The make-up man's work must be completed on the dot, or the work of the stereotyping and press rooms will be seriously delayed.

As soon as it can be determined how much page 1 will hold, a second make-up man takes the jumps and quickly fills up the break-over page and gets it away. Usually page 1 is ready a minute or so before closing time, but it is held up to the last second in case some big story should break and the page should have to be torn open again to make room for it. The second that the minute hand of the clock reaches the composing room deadline, the page is sent away to the stereotypers, and in a few minutes the presses start rolling. Because it is the last page to leave the composing room and the one for which the presses have to wait before they can start, the front page is often called the "starter page."

### EDITION MAKE-UP

In the meantime other page forms have come back from the stereotypers, and other floormen have been opening them up. Under the make-up editor's direction, the "bulldog" or time filler material, which has been used to fill out some of the inside pages for the first edition, is thrown out, and news from the front of the paper is worked back as fresh news comes in for the front. Not all pages are made over for every edition. Society, sports, editorial, women's, home, and magazine pages "ride" all day as they are made up for the first edition. One by one the news pages are filled up and can be put away for the day. New pages are added as new advertising comes in, and thus a metropolitan daily grows in size as the day progresses.

Each successive edition, however, means a new task for the make-up men. News pages must be remade to carry later news and to play different kinds of news. There is the state mail edition, perhaps, which must play up state news rather than local and must carry many small stories from correspondents all over the state. There may be special suburban or section editions featuring news from various sections. There may be a market edition giving complete market and financial news. There is the home edition, which plays local news; and perhaps a late sporting edition, which plays up the final results of races and baseball or football games. Each edition must have a new front page—a new banner head perhaps—and must play different news so that it does not appear the same as the edition that went before.

Sometimes, just as an edition has been sent to press, a cal comes from the news room that a big story has broken and tha the front page has to be changed in order to include it. Such ar extra edition, involving only the making over of the front page is called a *replate*. The front page form is ripped open. Storie must be slashed and type matter juggled around to make roon for the new big story. It is an emergency that tasks the skil and ingenuity of any make-up man. The presses keep righ on rolling while the replate is being made, and stop only long enough for the new stereotype front page plate to be substituted.

If there is any one member of the editorial staff who must know typography more than any other it is the make-up editor His work is one of the most responsible on the paper. It is the last step in the editorial department's work, and on him more than on any other depends the final appearance of the paper. The make-up editor's job, at the same time, is one of the most interesting. He is right on the firing line and gets all the thrills of racing to make successive editions. There is something creative, too, in building newspaper pages and turning out whole newspapers. Many newspaper men find make-up the most interesting part of newspaper work.

On the small daily there is no special make-up editor. Any one of the news editors may have make-up delegated to him. There is also not the rush of the metropolitan paper, for usually one or two editions suffice. However, with limited linotype capacity and a more limited staff, there may be as much of a rush in making two editions as in making several times that many on a larger paper. Inside pages must be put away early and there should be a regular schedule of page closing in order to keep forms moving along at regular intervals throughout the day. More time must also be allowed between the copy deadline and the closing of the last form because of the fewer linotypes and make-up men that one has to work with.

### CORRELATING COPY DESK AND COMPOSING ROOM

The make-up editor acts as a liaison officer between the editorial and the mechanical departments. Yet, his first contact with the news matter is when it comes up in galleys ready to

be built into newspaper pages. Previous to that point the copy desk has been dealing with the composing room direct, and it is very important that every piece of copy be sent to the copy cutter and his linotype operators with directions so specific that there will be no question as to what the editor wants done with a story, and no chance for confusion and delay in handling the different parts of a sectional story. This is one of the most important things for a copyreader to remember.

From the way in which story and headline are separated when they come to the composing room it can be readily seen why it is so important for the copyreader to slug carefully both story and headline and any additions or inserts that may follow, so that every part of the story will come together in its proper order on the assembling bank.

Many a story has gone unproofed and has failed to get into the paper because the copyreader forgot to put an "end mark" at the end of his story. When the printer sees an end mark, he automatically puts an "end dash" at the end of the type matter. This serves as a flag to everyone in the shop to show that the story is complete and is ready to be proofed and put in the paper. Until that end dash appears at the end of the story, it is considered incomplete and it may lie there, missing edition after edition. It is very important that copyreaders know how to use the system of markings used in communicating instructions to the composing room.

### MARKING DIRECTIONS TO PRINTERS

All directions to the printers are placed in the upper left-hand corner of each piece of copy and are ordinarily enclosed in a circle. If the story consists of only a single take, the slug line will include only the name of the story and its headline number, thus: "Flyer—# 2." If the story is "sent down running" in several sections, the first take might be labeled "Lead Flyer—# 2," and succeeding parts of the story "Add—1—Flyer," "Add—2—Flyer," "Add—3—Flyer," and so on. The headline number need appear only on the first slug. At the end of the last take the copyreader carefully places an end mark, # or *30*, or simply *end*. If the story is not complete, the word *more* is placed at the end, and this same mark must be placed on the end of each *Add* until the story is complete.

### INSERTS

Often it happens that after the story has apparently been completed and sent to the composing room, new facts develop which must be incorporated in the story. Such new developments are handled as "inserts." If a proof of the original story is available, the copyreader marks a large arrow in the left-hand margin of the proof pointing to the place where the new section is to be inserted. Within this arrow he writes "Insert A—Flyer." This proof is sent to the composing room with the new copy, which also is marked "Insert A—Flyer" so that there will be no question as to where the insert is to go. On some metropolitan papers, instead of using the arrow on the proof, the copyreader draws a line from the place where the new matter is to be inserted out to the margin, where he writes "Turn Rule for Insert A" and rings these instructions. When the man who is assembling the story in the composing room receives these instructions, he turns up a rule at that point in the story. This serves as a flag to show where the new matter is to go as soon as it comes from the linotypes.

If more than one new angle develops, succeeding inserts can be marked "Insert B," "Insert C," and so on. Sometimes, after Insert A and perhaps Insert B have been sent down, new developments come in, which must go ahead of the matter in Insert A. In that case a new set of symbols must be used, and it is customary to slug them as Inserts X, Y, and Z. If an insert runs long, it may be divided into takes. The first is slugged merely "Insert A—Flyer," and carries "More" at the end. Succeeding takes are slugged "Add 1—Insert A—Flyer," "Add 2—Insert A—Flyer," and so on. At the end of the insert, the copyreader must be careful to mark "End Insert A" so that the man assembling the story will not hold it up, waiting for more to come on the insert.

### NEW LEALS

Often new developments to a story are so important that it is necessary to write a new lead. While the reporter or rewrite man is typing this new lead, the copyreader calls for a proof of the original story from the composing room and kills the old lead by drawing cross lines through it and marking in the left

margin, "Kill." Then, as soon as the new lead is up, he corrects the paragraph in the old story immediately following the lead so that it will conform to the new lead. The rest of the story then becomes the "pickup," since it does not need to be reset, but can be used with the new lead after being corrected. At the head of this pickup the copyreader marks "Turn rule for new lead—pick up old story as corrected." At the head of the new lead he writes "New Lead—Flyer," and at the end he marks it "End New Lead—Turn Rule to pick up Old Story as Corrected."

When these instructions arrive in the composing room, the make-up man lifts out the old lead marked "kill" and throws the slugs aside. At the same time he turns up a rule to mark where the new matter is to go. The copy cutter in the meantime has passed out the corrected proof to a linotype operator, who resets the lines to be corrected. These slugs, wrapped in the proof, go at once to the make-up man, who pulls the faulty slug lines out of the first paragraph of the pickup and inserts the new slugs in their place. As soon as the new lead comes up from the linotype dump, the make-up man slips it into its place at the head of the pickup, pulls out the upturned rule, and the story is ready to go into the page form.

### BULLETINS AND PRECEDES

Sometimes it happens that important new facts come in so close to the deadline that there is no time to change the story around and incorporate these new developments. When that happens, the new matter is usually handled as a "Bulletin Precede." The copyreader marks it for one-half em indention on either side, and within the "indent brackets" writes bf for boldface. Many papers head these late precedes with the word "Bulletin" set in boldface caps. At the top of the sheet the copyreader writes his slug, "Bulletin Precede—Flyer" or "Lead All—Fire," and at the end of the bulletin he marks, "End Bulletin—Turn Rule for Lead." In handling wire stories, it often happens that late flashes having an important bearing on the story come in from several points under different datelines. Each of these may be handled as separate bulletins and slugged in order, "First Bulletin," "Second Bulletin," and so on.

The procedure outlined above applies also to other matter such as editorial notes, summaries, or convention programs which

the editor may wish to place at the head of the story. All such matter is usually indented to distinguish it from the rest of the story. Editorial notes are frequently marked for italic or 6-point. Summaries and programs usually go in boldface. This matter is simply marked "Precede," with the name of the story as the rest of the slug. At the end is written "End Precede."

When matter so slugged gets to the composing room it can easily be accommodated, even though the story with which it goes is already placed in the type page. All that the make-up man has to do is to push the story down an inch or two in its column and slip in the bulletin or precede at the head. The last paragraph or two of the story may have to be dropped, or a short at the bottom of the column may be jerked to allow for the extra space taken by the bulletin. But such changes can be easily made in the last minute or two before press time, whereas new leads would be out of the question.

### FOLLOWS

Many times the telegraph editor finds he has several related stories coming in under different datelines. He may be handling a big flood story, for instance, and find a number of minor reports coming in from other towns threatened by rising waters. Obviously they cannot be incorporated under the same dateline as that of the main story, so he handles them as "follows." They are slugged in their order of importance "First Folo –Flood," "Second Folo—Flood," and so on. Most newspapers include in their headline schedules a small special headline called a "folo-head," usually only a little larger than the ordinary subhead, which goes at the head of each follow story. In the composing room these follows are placed at the end of the main story in the order that they are slugged.

Follows may be used as often in handling local news. Minor fire stories can be grouped together as "follows" at the end of a big fire story, or often a wire story having a bearing on a local story can be used as a follow to it. The directions to the printer are the same.

### HANDLING A-MATTER

Most newspaper offices try to keep a step ahead of the news in preparing for a big story. If, for instance, some prominent

public official were near death, it is probable that some reporter would be assigned to write up, from material in the morgue, a story on the man's life and career so the story will be ready when the actual event breaks. When the first flash comes over the wire, the copy desk man handling the story can immediately send this advance matter down to be set up while the details of the death are coming over the wire. Such advance material is slugged "A-Matter—Brown—Turn Rule for Lead to Come." The main story then follows as "Lead Brown," and at the end are written the words "End Lead Brown—Pickup A-Matter."

### SUGGESTIONS FOR THE STUDENT

The "shears and paste-pot" practice in make-up, suggested in connection with the preceding chapter, should now be supplemented by the actual make-up of type page forms on the stone in the printing laboratory. Only by translating dummies into type forms can the student get an understanding of the mechanical problems involved in newspaper make-up.

*Exercise 1*

Let classes in copyreading prepare front page dummies for the news material that they have edited and written headlines for.

Then in type laboratory have students set up the headlines which they have written and make up skeleton type page forms on the stone. These forms need contain only the newspaper nameplate, and the headlines placed in the positions called for in the dummy, with column rules in between. The blank spaces representing the news stories can be filled out with furniture, and the pages can then be locked up and proved.

*Exercise 2*

Successive periods can be used to advantage in building skeleton page forms to represent the different styles of make-up.

*Exercise 3*

After this preliminary work, arrangements can be made with the local newspaper to borrow the linotype matter for one or two front pages after it has been used in the paper's regular editions.

Run off galley proofs of this matter and have students design and paste up new front pages, writing in all headlines.

At the second period, students may set up the headlines and then proceed actually to make up the type form on the stone, filling out the columns with the linotype matter that goes with each headline. Careful attention should be paid to the proper use of rules and dashes and to

the leading out of columns to make them come out right. The page can then be locked up and proved.

*Exercise 4*

In a similar manner linotype matter can be borrowed to make up editorial, society, home, magazine, and other special department pages.

*Exercise 5*

Using the linotype news matter in Exercise 3, let students design and make up tabloid size front pages to get an understanding of the problems peculiar to four- and five-column make-up.

*Exercise 6*

For practice in giving proper directions to the composing room for edition changes, obtain copies of the noon edition of the local paper. Clip the major stories and paste them up into galley proof form. Now obtain copies of the evening or final edition of the same paper for that day and note all changes that have taken place in the major stories clipped from the first edition. Clip out of the evening paper only such new matter as did not appear in connection with these stories in the earlier edition. Mount these adds, folos, inserts, or precedes on separate sheets of paper and treat them as if they were new copy going down to the composing room for the evening edition. Slug carefully so that each new piece of copy will appear in its proper place in the evening edition story. Then, treating the first edition story as the galley proof, mark on it the proper directions for inserts, kills, and corrections for pickup, so that there could not possibly be any misunderstanding in the composing room.

# CHAPTER XII

## THE MAKING OF STEREOTYPES AND OTHER PRINTING PLATES

WHEN a newspaper page has been made up according to the editor's dummy, as described in the preceding chapter, and the page form has finally been locked, it is ready for the next step in the printing process, the making of stereotype plates from which the paper is to be printed.

Small newspapers and publications are printed direct from type forms on flat bed presses, but the number of pages and the speed of printing is limited because of the small capacity of such presses. The modern rotary press, which has made possible the great daily newspapers of today, requires that the page forms be cast in semi-cylindrical metal plates that can be clamped on the cylinders of the press to print upon the web of paper passing between them. This process of reproducing the surface of the flat page form on a curved plate with the thousands of type faces protruding from its outside surface is called stereotyping. The process of course is not limited to the casting of curved plates, but applies also to the casting of flat plates to duplicate cuts and smaller type forms, which will be discussed later.

### EARLY STEREOTYPERS

While various processes of stereotyping had been in use since early in the eighteenth century, it was not until the time of the Civil War that stereotyping was perfected to the point where it could be adapted to reproduce newspaper pages.

One of the earliest experimenters was William Ged, an Edinburgh printer, who in 1725 invented a process of making a plaster of Paris mold of the type page, into which he poured molten metal. When this cooled it made a solid metal plate in exact reproduction of the type page. A few years later a Frenchman,

Gabriel Valleyre, invented a similar process, using a clay composition for his mold. Despite the possibilities stereotyping held out to publishers, it did not enjoy a wide use because the plates produced from these plaster or clay molds did not give as good a printing surface as could be obtained from the type itself. Furthermore the new art met with intense opposition on the part of almost all printers because they feared it would throw many of them out of work.[1]

### WET MAT STEREOTYPING

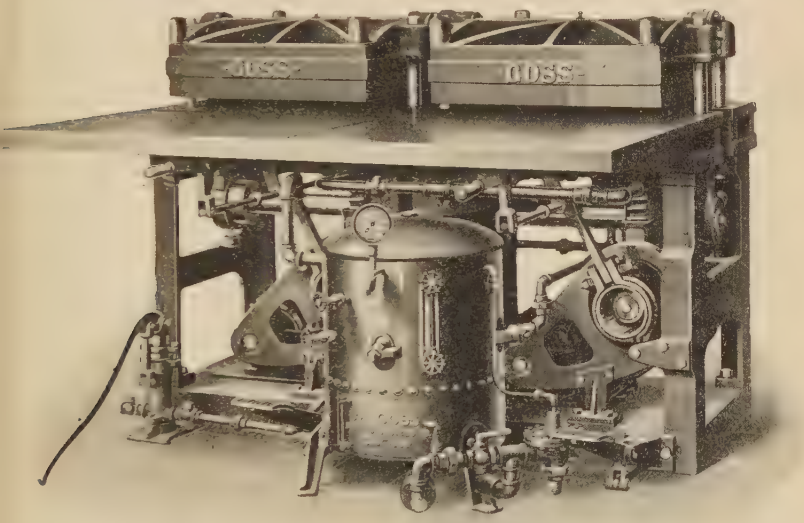
It was not until 1829, almost a hundred years later, that Claude Gennoux, a French printer, invented the papier-mâché or wet-mat method of stereotyping. Gennoux made a paper matrix by pasting together seven layers of paper with a mastic composed of clay, hide-glue, and oil. This soft sheet was laid over the type form and placed in a press. When dry, the lower surface, which had received the impress of the type faces, made a perfect mold into which molten metal could be poured to make a metal plate of the type page.[2] This process had many advantages over the clay or plaster of Paris methods, for it was much faster and cheaper. Furthermore several plates could be made from one matrix, whereas only one plate could be made from the plaster or clay molds, since they had to be broken to remove the finished plate.

Many improvements were made to the Gennoux wet-mat process in the next few years, most important of which was the invention of an oven to bake the mat while it was being pressed down on the page form, thus hastening the drying process. Wet-mat stereotyping, however, was slow of adoption. For twenty years it was employed solely for the printing of books. Then in 1852 *La Presse*, a Paris daily newspaper, adopted Gennoux's process and led the way to a wider use and greater development of stereotyping. Two years later an American, Charles Craske, produced the first semi-cylindrical stereotype plate for the *New York Herald* by bending his mat and placing it in a casting box curved to the circumference of the press cylinders. These semi-cylindrical plates displaced the wedge-shaped columns of type

[1] George A. Kubler, *History of Stereotyping*, pp. 18, 21.
[2] *Ibid.*, pp. 37, 38.

on the type revolving presses of the day and led the way to the development of the rotary press.[3]

The wet-mat process of stereotyping was until recently used by most daily papers. Wet mats were made up every morning by pasting together alternate layers of thick unsized paper and tissue. When a page form was locked and ready it was pushed from its truck onto the steam table. A wet mat was then placed over the page form and covered with a heavy felt mat. The stereotyper pushed the form under the steam press and lowered



PNEUMATIC STEAM TABLES

These tables press wet mats down on type forms and bake them at the same time.

the heavy platen down on the page. The mat thus was subjected to heat and pressure at the same time. In from four to seven minutes the baking was completed; the form was removed from the press, and the mat lifted off. Any large blank spaces which might give way under the pressure of the molten metal were backed up by pasting strips of cardboard on the reverse side of the mat. When this was completed the mat was sent down a conveyer to the casting room to be used as a mold for the semi-cylindrical

[3] *Ibid.*, p. 54.

plates for the press. Most large newspapers had long steam tables equipped with several of these stereotyping presses so that it was possible to make mats from several page forms at once.

### DRY-MAT STEREOTYPING

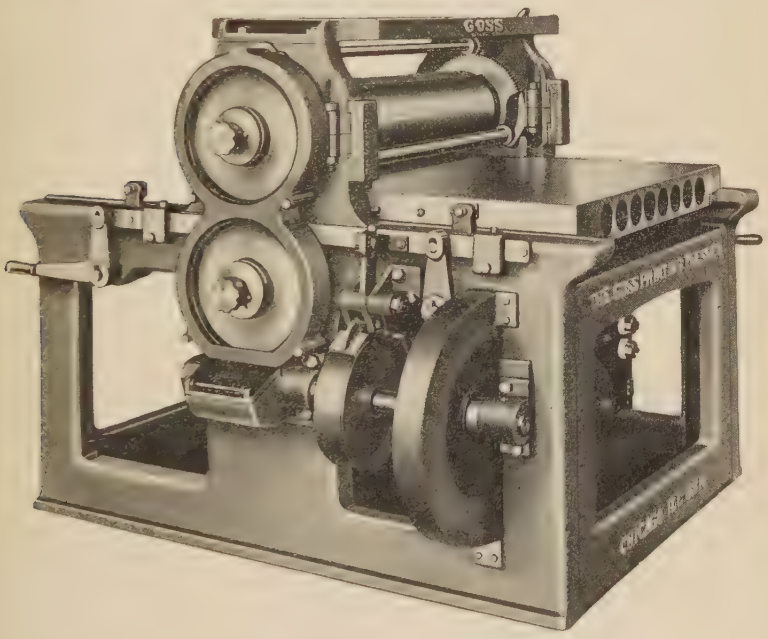
Today newspapers are rapidly changing to the dry-mat process of stereotyping, the invention of an Englishman, George Eastwood. The greatest development of the dry mat, however, took place in Germany, following a similar invention by Hermann Schimansky.[5] A number of American newspapers as early as 1910 went over to the dry-mat process and imported their mats from Germany. But the World War put an end to these importations. It was not until 1917 that Henry A. Wise Wood of New York undertook the manufacture of dry mats in this country and thus made this process again available to American newspapers. But their adoption lagged. After years of study of the German dry-mat stereotyping George Kubler of Akron, Ohio, brought out in 1924 a new and improved mat, and in the same year founded the Certified Dry Mat Corporation.[6] Today a number of large firms are supplying dry mats to publishers. Present-day dry mats have proved very satisfactory for all sorts of printing and present advantages over the wet-mat process which have led many newspapers to adopt the former.

The dry mat, unlike the wet mat, does not consist of successive layers of paper; hence it does not blister. Dry mats are bought in quantities and stored until needed, thus eliminating the previous daily drudgery of pasting up wet mats. Each week the stereotypers merely place the quantity of dry mats they will need in a humidor for twenty-four hours. There they absorb enough moisture to become sufficiently soft to take the impress from the type. They are then placed in storage boxes from which they can be taken as needed.

When an impression is to be taken, the mat is laid face down on the type form, and a molding blanket of felt or cork is placed on top. The form is then passed slowly under a roller to press the mat down on the type. And right there is one of the great

[5] *Ibid.*, pp. 65, 69.
[6] *Ibid.*, p. 79.

advantages of the dry mat, for that one operation is the only one in which the type form itself enters. In the old wet-mat process the form itself was placed under the steam press and heated to a high degree in order to bake the mat. If a replate of the page had to be made in a hurry, the form would have to be cooled quickly so that printers could work on it. This sudden expansion and contraction of type was ruinous to expensive foundry type. Furthermore the type forms were tied up under the steam press for anywhere from four to seven minutes, and in a newspaper composing room those minutes often meant ex-




DRY MATRIX ROLLING MACHINE

pensive delays. With the dry mat, the type form is available immediately after it has gone under the roller, a process that takes but twenty or thirty seconds, and it is cool so that printers can begin work upon it at once.

Some publishers insist, however, that printing results are better with the wet mats. Each process has a large following.

### PREPARING FOR THE CAST

When the mat is removed from the form it is backed up with strips of felt packing in the open spaces, just as was done with the wet mats. The mat of course is quite thin. The pressure of closely set type pushes the mat into ridges that strengthen it wherever it touches type masses. But in the larger open spaces —the margins and the areas of white space in ads—where there has been no such strengthening, the weight of the molten metal is likely to bulge the mat and cause the plate surface to be higher at such spots. These high spots would print on the paper and appear as black smudges. Therefore the stereotyper is very careful to back up the mat in all open areas to prevent any bulging and resultant black spots.

This done, the mat is sent down to the casting room where it is placed first in the "scorcher," a device that shapes the mat to conform to the curvature of the cylinders of the press, and at the same time thoroughly dries and bakes it. This scorching or roasting process, as it is sometimes called, usually takes less than a minute, so that the whole dry-mat process shaves several minutes from the time necessary under the old wet-mat system.

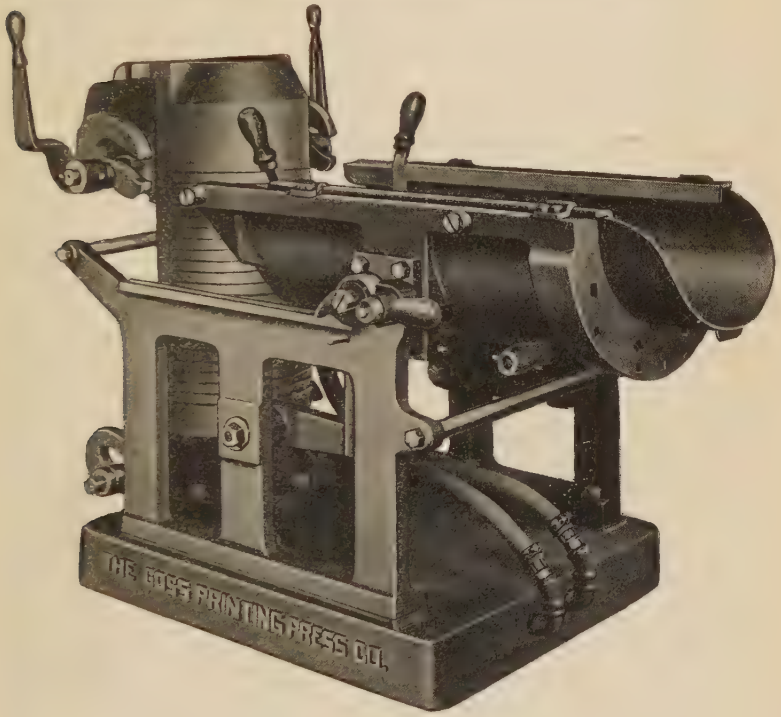
During the drying, the mats shrink slightly, hence, without altering make-up in any way, it is possible to print on a narrower roll of paper. This is utilized by some publishers to effect a saving in paper bills. An eight-column paper using $12\frac{1}{2}$-em columns, for example, can be printed on 71-inch rolls instead of 72-inch rolls as formerly.

The many advantages of the dry-mat cold stereotyping process are obtained without any sacrifice of good printing. Good clear impressions are obtained, and not only line engravings, but coarse screen half-tones as well are clearly reproduced.

### CASTING THE PLATE

From the scorcher the mat goes directly to the casting machine. This consists of a melting pot containing the molten metal and the casting box proper. In the simple hand-operated casters the mat is placed in the semi-cylindrical casting box with its type surface facing inside. The molten metal is then scooped out of the melting pot with a ladle and poured into the narrow aperture

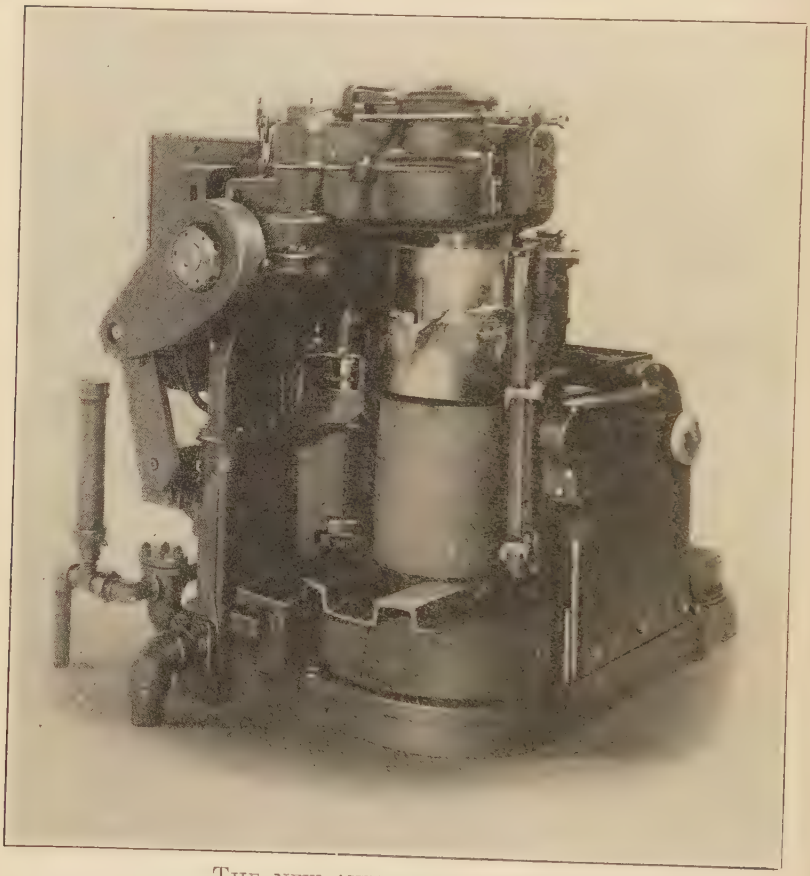
at the top of the box. The mat thus provides the mold for the outside surface of the plate, while the curved wall of the casting box supplies the inside surface. When the metal has cooled, the box is opened and the semi-cylindrical plate is removed.




A HAND OPERATED CURVED PLATE CASTING BOX

While these slow-moving hand-casting boxes are still in use on many smaller papers, they have been displaced in most larger plants by automatic casters. The first automatic caster was invented by Henry A. Wise Wood of New York in 1900 and was first used on the *New York Herald*. In the advanced models of the Standard Autoplate, being used by many large newspapers today, the operation of casting is performed automatically from the time the mat is placed in position until the finished plate emerges ready to be clamped on the press. The stereotyper merely puts the mat in place, pulls a lever, and the machine does the rest, producing as many as four plates per minute. The casting is done against a horizontal cylinder or "core," the interior of

which is cooled with water. Below it is a frame or "bask" holding the mat. This bask has an up-and-down movement of about six inches. When it is in its topmost position there is a semi-circular space between the mat and core equal in length, breadth, and thickness to the plate that is to be cast. When the mat is in

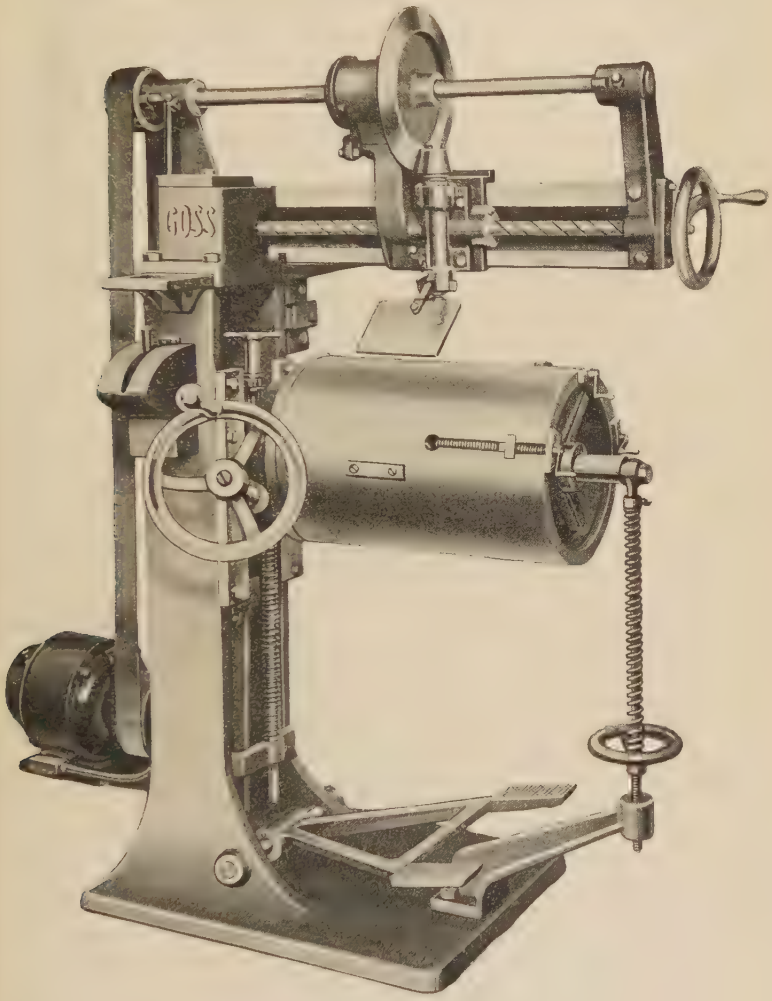


THE NEW AUTOMATIC AUTOPLATE

position the operator pulls the lever that closes the box. Molten metal is pumped into the space between the core and the mat. There is a pause of a few moments while the metal solidifies, then the bask falls away, bringing the mat with it. The semi-cylindrical plate is pushed out, and simultaneously the core makes a half-turn and presents what was previously its upper

half to the mat, as the bask moves the latter upward into position for another cast.

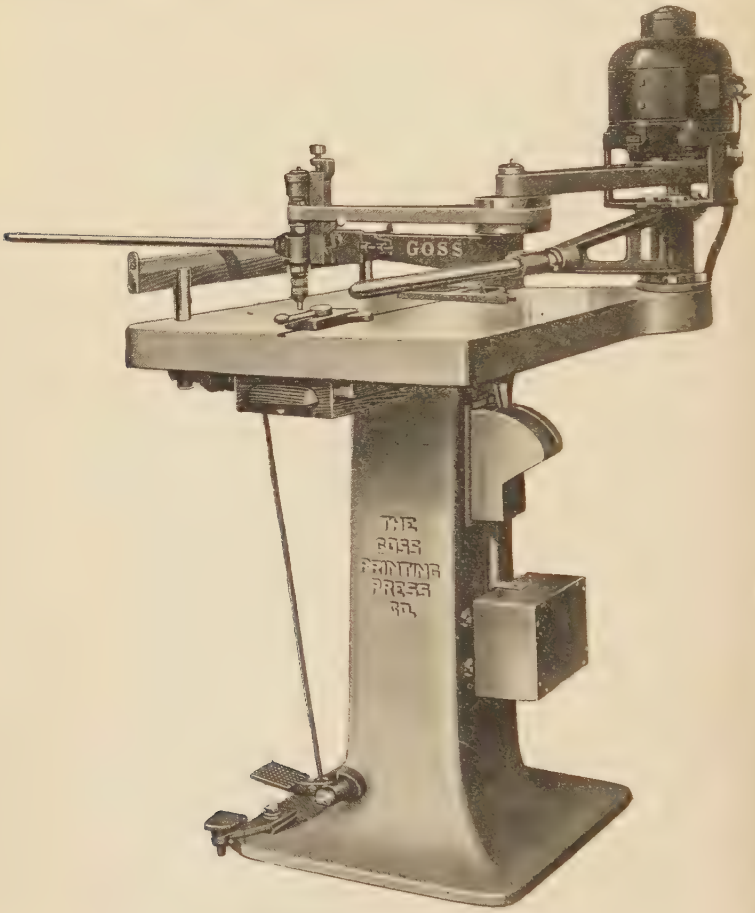
In the meantime the first plate has been pushed along a con-




CURVED ROUTER

veyor against two rotating saws which trim its edges. It comes next under a shaving arch, where its interior surface is smoothed to a proper thickness. Then it passes over the bevelers, which cut the beveled edges on the side of the plate on which clips

hold the plate to the press cylinders. During its final stages down the conveyor, water is directed against the back of the plate to cool it without wetting its printing surface. When it emerges,




Radial arm flat router

the plate is cool enough to be handled. A workman quickly inspects it and with a "router" shaves down any protruding areas of metal that might take ink and print. When ready, the plate is carried to the press, where it is clamped on its proper cylinder.

### THE AUTOPLATE JUNIOR

The Autoplate Junior, found in many newspaper plants, is a semi-automatic caster. The casting is done against a vertical cylinder or core instead of a horizontal one. After the matrix is placed in the box, the stereotyper pumps the metal in by hand; then, as soon as it solidifies, he pulls a lever which opens the box. As the core revolves, the tailpiece of surplus metal is cut off. The plate is then removed and placed in the autoshaver, which shaves, trims, bevels, cools, and dries it. The Junior Autoplate casts plates at the rate of two a minute. A new development is the Automatic Autoplate which eliminates the hand operations. The metal is pumped in automatically, and, as soon as the metal solidifies, the box opens, the core turns, and the plate is automatically delivered ready for the autoshaver. This is all done at the rate of four plates per minute. In Europe there has recently been produced the Winkler Automatic plate casting machine, which is said to turn out perfectly true plates so that no shaving or trimming is necessary.

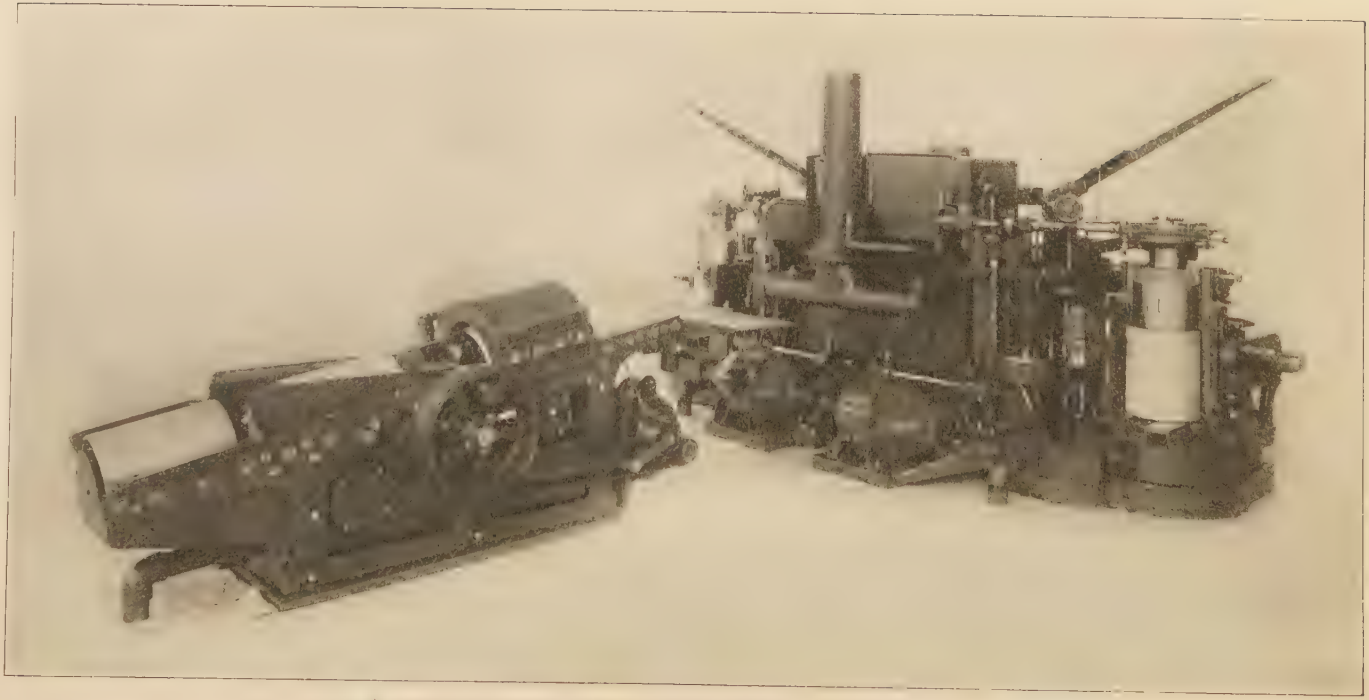
Where autoshavers are not used, the stereotyping room must be equipped with separate machines for sawing, trimming, and beveling the plates. The shaving and routing are done by hand.

Usually two or more plates are made from each mat so that the page can be printed on more than one unit of the press at the same time, thus speeding up production. On papers equipped with many unit multiple presses, as many as twenty stereotype plates are often made from each mat, and all units of the press are run at the same time so that tremendously large editions can be printed in a very short time.

Stereotype plates are not always made in semi-cylindrical form. For the small cylinders of Duplex presses the plates are made in the form of complete cylinders.

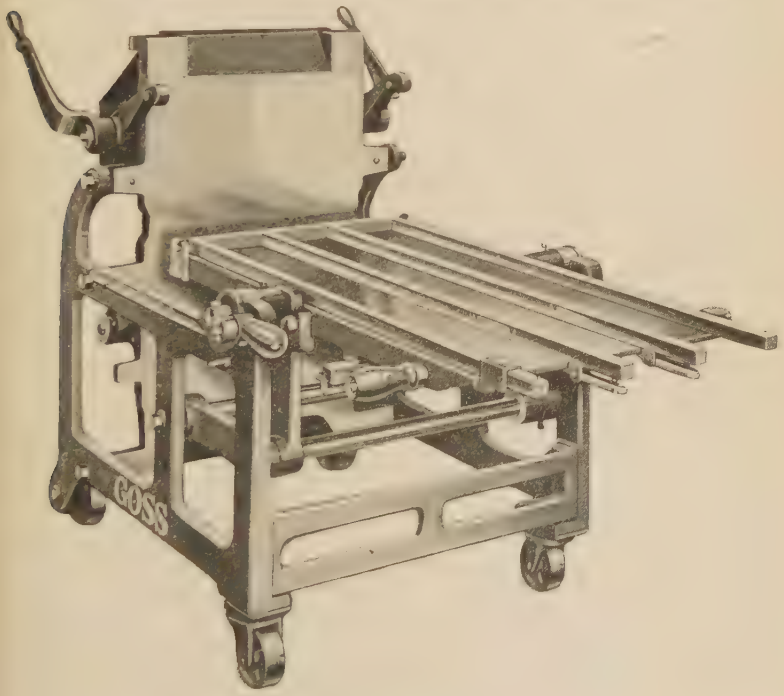
### FLAT STEREOTYPES

Every newspaper equipped to do stereotyping has also flat casting boxes to make stereotypes of pictures, cartoons, and other syndicate matter. Stereotyping, in fact, has made possible the tremendous expansion of present-day syndicates. Once the type matter has been set up and the engravings made in the syndicate



A DOUBLE JUNIOR AUTOPLATE WITH AUTOSHAVE EQUIPMENT

office, any number of mats can be made from the originals and supplied to newspapers at a fraction of what it would cost each newspaper to prepare this material itself. To smaller newspapers which do not have stereotyping equipment, syndicate matter can be supplied in the form of thin stereotype plates, cast in regular column width. The editor edits these plates with a saw to fit the holes in his pages that he wishes to fill up, and mounts them on



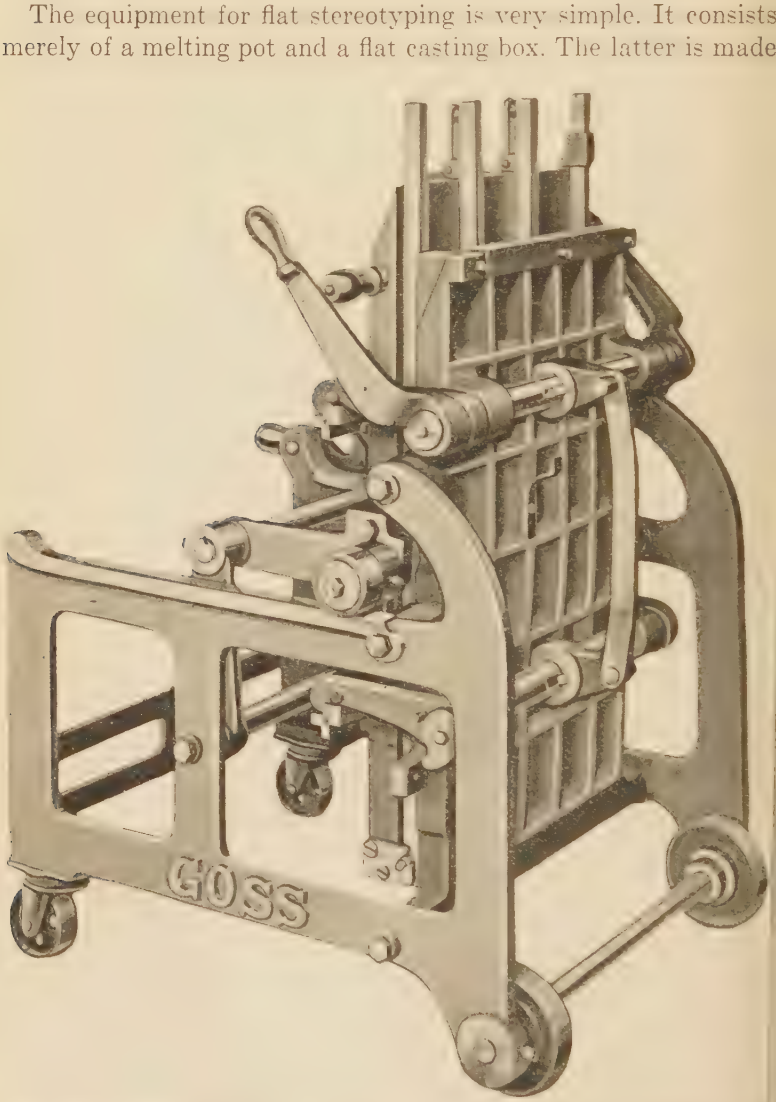

A FLAT CASTING BOX

standard bases to make them type high. Most newspapers rely on the syndicates for much of their feature material, most of their general news pictures, and often, with smaller papers, for their telegraph news as well.

The picture services placed at the command of the present-day editor through these syndicate mat services are one of the most interesting developments of modern journalism. Pictures taken by syndicate photographers all over the country are rushed to syndicate offices by airplane and telephoto. Engravings are made,

and stereotype mats of them are sent out immediately by airmail to member newspapers, so that in a very few hours they can give their readers pictures of persons and places that have figured in the day's news.

The equipment for flat stereotyping is very simple. It consists merely of a melting pot and a flat casting box. The latter is made




THE FLAT CASTING BOX IN A VERTICAL POSITION READY TO RECEIVE THE MOLTEN METAL

of a flat steel table with a hinged cover. To make a cast, the stereotyper places his mat flat on the table with the impression side up. Then he adjusts his guides, placing them on the mat and around three sides to hold in the molten metal. The cover is now closed down on the guides, and the whole casting box is tipped from a horizontal to a vertical position. The molten metal is poured in through the aperture at the top and, held in by the guides, it makes a flat cast the size of the space between the guides. After giving the metal a few seconds to solidify, the box is lowered to a horizontal position again, the cover is raised, and the cast removed. The surplus metal around the picture or type matter is then removed by a saw trimmer.

These flat casts are about an eighth of an inch thick. To bring them type high they are mounted on standard wood bases. On papers that do not print from the type form itself, but rather from stereotype page plates, it is seldom that printers go to the trouble of mounting casts on wood bases. The only operation in which the type form enters is the making of the impression on the mat. Hence it is not necessary to fasten the casts down securely. The printer merely builds a base of ordinary slugs and lays the cast on top. Care must be taken, however, to see that the cast is in the right position and has not shifted sideways as the page goes under the stereotype roller.

Many small newspapers which print from flat bed presses and have no need of stereotype page plates nevertheless have a flat stereotyping equipment in order to take advantage of syndicate mat services for news and advertising illustrations.

### OTHER FORMS OF DUPLICATION PLATES

While the newspaper man is principally concerned with stereotype plates, there are other forms with which he should be acquainted. Principal among these is the electrotype, commonly called "electro." This is a costlier process, but it produces a much finer printing plate. The newspaper man is bound to come in contact with electros frequently, because many advertisers, particularly national advertisers, prefer to supply newspapers with electros of their ads rather than trust to the limited type supply and slap-dash make-up provided by many newspaper composing rooms. Electros are used very extensively in the

printing of books and magazines because they give a very fine printing impression.

Instead of taking the impression of the type form or cut on a papier-mâché mat, in this process the impression is made on a wax slab. The type form is locked in a strong steel chase and dusted with graphite to prevent sticking. Then the wax slab is placed on top and subjected to heavy pressure. The resulting wax mold is carefully lifted off and is treated with graphite and a weak solution of copper sulphate to make it a conductor of electricity. It is then suspended in a tank containing copper sulphate, and an electric current is turned on for an hour or more. By electrolysis a thin film of copper is deposited on the face of the wax mold. This thin copper shell, when stripped from the wax, is an exact duplicate of the original type form. It is backed up with lead, trimmed and tooled, and is ready to be mounted on a wood or metal base. Its fine copper printing surface produces a better printing impression than does the stereotype. It cannot, however, take the place of stereotyping for general newspaper work because of the time involved in making electros.

A still more expensive plate is the nickel type, made by the same process as the electro except that nickel instead of copper is deposited on the wax mold. After a thin shell of nickel has been built up, the mold is transferred to a copper solution, and the remainder of the shell is made by depositing copper to back up the nickel. These nickel types are harder than electros. They are much used in color printing because they are not susceptible to the chemical action of colored inks.[7]

### Engraved Printing Plates

Stereotypes, electros, and nickel types can merely be used to duplicate type forms and cuts that have already been made. But every newspaper man is faced many times with the necessity of having plates made to reproduce original photographs or drawings, and it is well for the editor to know enough about engravings to be able to order his cuts intelligently.

Pictures are becoming more and more an important part of the business of news presentation today. In the early days of

[7] Ralph W. Polk, *The Practice of Printing*, p. 283.

American journalism, however, few illustrations were used. The only process known for reproducing pictures in newspapers was printing from wood blocks or chalk plates, and the making of woodcuts was slow and very expensive because of the highly skilled workmanship necessary. Few editors could afford to use pictures.

But in the early seventies there was invented the process of photographing pen and ink drawings and transferring these to zinc plates, which were then etched with acid to produce what came to be known as zinc or line engravings. These became the common form of newspaper illustration for many years. Then in 1882 the half-tone process was invented abroad. This was perfected by the American invention of the half-tone screen, which broke up the masses and showed both the lights and the shadows as in a photograph. At first, half-tones could only be used on slow-moving presses. It was not until 1894 that they were successfully stereotyped and printed on fast newspaper perfecting presses.[8] Since that time pictures have come into increasing use in newspapers. Photo-engraving has been so perfected that cuts can be made of local pictures at a small cost. Many large newspapers have their own engraving and art departments, and a staff of photographers to keep them supplied with live news pictures. Syndicates supplement local cuts with pictures from all over the world.

### LINE CUTS

The line cut is the simplest form of photo-engraved plate and is the kind the editor will order when he wishes to reproduce a piece of writing, a printed page, a cartoon, an architect's drawing of a proposed building, a map or chart, or any other form of picture that consists only of black lines against a white background.

A pen and ink drawing makes the best copy for a line cut. Pencil drawings can be used if the pencil is black enough. The copy should contain no grays. It is well also to remember that in attempting to reproduce an architect's drawing of a new building the blue prints will not do. To the eye of the camera, blue is the same as white, hence the white line of a blue print against

[8] Willard G. Bleyer, *History of American Journalism*, p. 396.

a blue background will show no contrast at all. Every point of a line cut must print either pure black or white.

When copy in the form of a drawing or chart is received in the engraving department, it is placed under a strong light and photographed on a sensitized glass plate in a large camera. This plate is developed in a dark room in much the same way as an ordinary kodak film. As soon as it is dry, this negative, as it is now called, is coated with rubber cement and collodion and then soaked in acetic acid. The film can now be stripped from the glass and remounted with other films on a large sheet of plate glass so that a number of pictures can be etched at the same time. As each film is placed on the glass it is turned over, so that when finished it will not print backwards.

A specially prepared and polished zinc plate is then coated with albumen, water, and bichromate of ammonia to make it sensitive to light. This is dried by whirling it over a gas plate in the dark room. When ready, the zinc plate and the large glass negative plate are placed in close contact in a printing frame under a powerful arc light for about four minutes.

The zinc print next is carefully inked by means of a leather roller and specially prepared ink. It is then placed under a faucet of running water in the dark room and carefully rubbed down with a piece of cotton. Everyone who has experimented with amateur photography knows that on the negative, black lines or black masses appear white and light masses appear black. In the negative from which the zinc plate was printed, therefore, there would be white transparent lines for every line in the picture. Through these transparent lines the light of the powerful printing arc penetrates and renders the coating on the zinc plate insoluble. In the rubbing and washing process everything not protected by the insoluble coating comes off. Hence there is left on the zinc plate only the lines of the picture protected by this coating. The zinc plate is powdered with a red substance called "dragon's blood," which adheres to the coated lines, and it is then heated and cooled again so that the dragon's blood forms an acid-proof coating over all the lines of the picture.

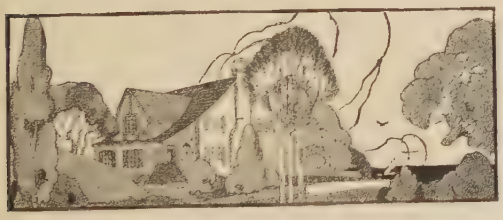
In order to have a printing plate it is necessary that the lines of the picture be made to stand out in relief from the rest of the plate. This is accomplished by cutting down with acid all areas not protected. The zinc plate is placed in an etching ma-

chine containing a dilute solution of nitric acid. The rocking motion of the machine dashes the mixture over the plate and permits it to eat away the unprotected surfaces. About two minutes are required for the first etching or "bite." Then the plate

*Line Etching on Zinc*

*Ben Day Line Etching on Zinc*

*Half-tone*



*Highlight Half-tone*

FOUR METHODS OF REPRODUCING DRAWINGS AND PHOTOGRAPHS

is removed and the lines are given another coating of dragon's blood. A second bite of about four minutes follows. The dragon's blood operation is repeated for the third and fourth bites. Then the acid-proof coating is removed by soaking and washing in a hot solution of lye. The finished plate presents the lines of the

original drawing cleanly etched in relief on its surface. Wide expanses of white space that might catch ink are routed still deeper by the routing machine, and a skilled workman carefully tools out by hand any small imperfections that might mar the beauty of the finished plate.

The zinc etching is now ready to be proofed. Duplicate proofs are sent with the plate, one proof going to the copy desk to be sent down with whatever cutlines and sluglines have been prepared for it. The other goes direct to the composing room with the plate for purposes of identification. In commercial engraving plants most plates are mounted on wood bases to make them type high, but for newspaper purposes the cuts are unmounted. The make-up man simply slips them in on the standard steel base or base of slugs that he has prepared for it in the page. Because cuts frequently do not come from the engraver before the last minute, the editor tells the composing room in advance the exact dimensions, so that the make-up men can proceed with the building of the page by merely building a base of the proper dimensions in the place where the cut has been designated.

### THE BEN DAY PROCESS

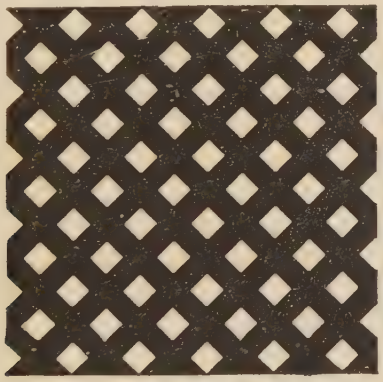
While the line cut, as described, provides only black lines against a white background, it is possible to produce the effect of shading by a process known as Ben Day. This shading can be applied either to the original drawing, to the negative, or to the zinc plate itself before it is etched.

The drawing or plate to be Ben Dayed is placed in a hinged frame, and against it is applied a celluloid film upon which the particular pattern of shading desired appears on the under side. This film is inked and then turned face down on the drawing or plate. By rubbing the upper side of the film with a stylus, the pattern is transferred to the copy so as to produce stippled dots, or fine rulings, or any effect that may be desired in the background. Different designs can be produced in different parts of the background merely by masking the areas not to be touched by the respective Ben Day patterns. The frame holding the film may be accurately shifted to new positions so that it is possible to re-ink the film and transfer the design as many times as desired; thus lines may be thickened, dots made to run together in more heavily shaded areas, and almost any pattern secured.

Ben Day is used a great deal in the making of sketches for newspapers and other publications. It saves the artist the work of shading in his backgrounds; all that he has to do is to draw the outlines and specify by number from the engraver's chart the variety of Ben Day pattern that he desires.

### HALF-TONES

Whenever the editor wishes to reproduce a photograph he orders a half-tone rather than a line engraving. The photograph, it is obvious, is made up not of lines, but of black, gray, and white masses. To reproduce these masses it is necessary to break up the printing area into myriad small dots or points, varying in size and in concentration.



A SECTION OF HALF-TONE SCREEN HIGHLY MAGNIFIED

To accomplish this the original photograph is rephotographed through a screen. This screen is made by cementing together two pieces of glass, each of which has had engraved upon it a large number of opaque parallel lines running diagonally across the surface. When the two pieces of glass are cemented together, the opaque lines cross each other at right angles forming a mesh similar to ordinary window screen but of course hundreds of times finer.

This screen is placed in the camera just in front of and very close to the photographic wet plate. A strong artificial light is turned on the original photograph, and as the cap of the lens is

removed this light passes through the fine holes in the screen, reproducing the picture on the wet plate in a pattern of very fine dots.

When this plate has been developed it is used to print the image on a sensitized copper plate, producing the same pattern of dots. The light passing through the transparent dots in the negative renders the coating on the dots of the copper plate insoluble. When the copper plate is placed under running water in the dark room, the coating between the dots, which was not exposed to the arc light, readily washes away. The plate is then soaked in a violet aniline dye solution, heated, and then cooled again, producing an acid-resisting enamel on each dot.

The plate is now etched with acid, or, in some modern plants, it is placed in an electric etching machine. In either case the exposed copper surface between the dots is eaten away, leaving the dots standing in relief. These little dots take ink and produce the picture in printing. Areas where the dots are closely concentrated produce the darker masses in the picture; areas in which there is more white space between the dots shade off into the grays and whites.

After the plate has been etched it is sent to the finishing room to be carefully tooled for any remaining imperfections, then it is trimmed, beveled, and mounted.

### NEWSPAPER HALF-TONES

The fineness of the half-tone is determined by the screen used. The greater the number of lines to the inch the smaller will be the openings between the lines and the finer the resulting dots. For fine printing on smooth finished papers half-tones of as high as 400-line screen are used. For newspaper work, however, such half-tones are too fine. Printing on high-speed presses and on rough newsprint, such half-tones ordinarily produce nothing but a black smudge. Particularly is this true for newspapers that print on rotary presses from stereotype plates. On flat bed presses, printing direct from the cut, it is sometimes possible to get fair results from fine copper half-tones.

As a rule, however, it is best to use coarser screen cuts for newspaper work. For papers printing on rotary presses from stereotype plates, best results are usually obtained from screens

of 60 to 65 lines per inch. This is because the stereotype mat will not take an accurate impression if the lines are closer together than 60 to 80 lines to the inch. These coarse screen half-

*100-line screen*

*85-line screen*

*65-line screen*

*55-line screen*

FOUR HALF-TONE SCREENS MOST COMMONLY USED BY NEWSPAPERS

The dot arrangement which produces the picture can be plainly seen in the 55- and 65-line half-tones above.

tones are usually made on zinc plates because zinc is cheaper and will produce a satisfactory half-tone for any screen below 100 lines. The finer half-tones for book and magazine work are made on copper and are usually from 133- or 150-line screens.

Smaller newspapers printing on flat bed presses and direct from the type forms are able to use better half-tones, and good results can be obtained from cuts carrying from 85 to 120 lines per inch. When printing direct from the cuts it is necessary for the pressman to even up the cuts with underlays and overlays. This process is called make-ready. It is usually accomplished by pasting overlays of thin paper or tissue on the tympan of the press cylinder over the exact spot that will press the paper down on the cut, in order to bring out its tones better. In stereotyping, a piece of stiff paper is frequently placed on the mat over the cut to press that mat more firmly into it and thus better bring out the cut.

### ORDERING CUTS

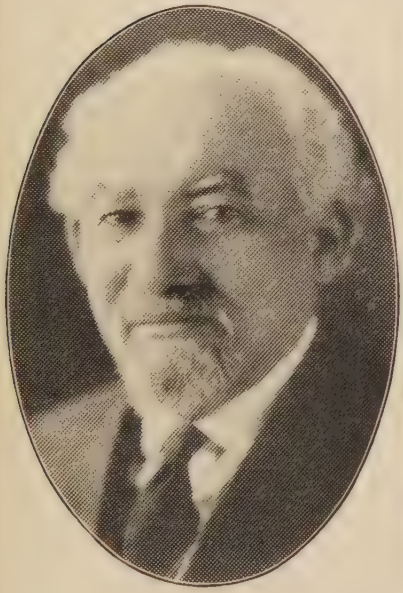
Glossy photographs make the best copy for half-tones. Good contrast is desirable. Strong whites and blacks come out better in the somewhat rough processes of printing coarse screen half-tones than do the more artistic efforts of photographers who strive for soft focus effects printed on sepia browns and other colored papers.

In ordering cuts the editor need specify only one dimension —the column width; the size of the photo or drawing determines its vertical dimension. It is easy, however, for the editor to find out how deep his cut will be if, for instance, he wishes to know how much space to save for it in his page. Say that the original photograph measures 6 by 9 inches, and the editor wishes to reduce it to a one-column cut. All that is necessary is to lay the picture on a page of the paper with the left-hand edge of the picture flush with a column rule. Then draw a rectangle around the picture. Now remove the picture and draw a diagonal line from the upper left-hand corner of the rectangle to the lower right-hand corner. The point at which this diagonal crosses the first column rule within the rectangle marks the depth of the one-column cut. If the editor wishes to enlarge the size of the cut, he proceeds in the same way and merely extends the diagonal until it crosses the column rule marking the width of the cut he desires.

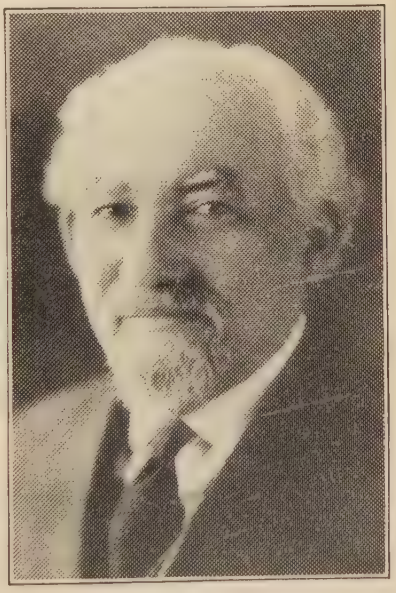
Directions also include the specifications as to the screen that is desired for the half-tone, or the kind of Ben Day, if any, that is to be used on a zinc engraving. The kind of edge finish wanted

*Vignette*

*Outline*



*Oval with Line*



*Square with Line*

FOUR STYLES OF EDGE FINISH FOR NEWSPAPER CUTS

also should be specified, whether square, oval, outline, or vignette. There are many other combinations of these four, and the editor may sometimes use them on society page layouts. One can, for instance, have three sides of a cut square and the other side vignetted, or two sides square, and the other two outlined. But for most purposes the square finish is most readily adaptable to newspaper uses.

All directions to the engraver are marked on the back of the photograph or, better yet, on a slip of paper pasted on the back. Care should be taken not to mark too heavily, for the pencil mark may cause abrasions that will show up in reproduction.

### COLOR PLATES

The newspaper man will come in contact with color engraving in the printing of his Sunday comics and Sunday supplements. The advertiser will have many uses for color printing in producing different kinds of advertising pieces. Color not only attracts attention, but it also enables the advertiser to portray his product as it actually appears, an advantage which is being used more and more.

In color printing, a separate plate is necessary for each color. But since all colors are made from combinations of the three primary colors—red, blue, and yellow—only three plates usually are necessary. In a full color job there must be one plate to print all the blue areas, another to print all the red areas, and a third to print all the yellow areas. Where green is desired, the blue and yellow plates are made to overlap; orange can be secured by overlapping the red and yellow, and so on. Often a fourth or black plate is added to bring out the deeper, richer tones of a picture. Look at some of the colored advertisements in magazines and observe the relation of the colors.

To make these separate color plates, the original colored picture is photographed through glass color-filters. At the first "shot," the picture is photographed through a filter that excludes all but the red rays and the red components of mixed areas. This produces a plate that will print only the reds. The same process is repeated to get a blue plate and a yellow plate. If a fourth or black plate is desired, it is obtained by photographing without a filter. The four plates are then carefully mounted and trimmed

so that their separate impressions will coincide or register in printing.[9]

If the color picture is to be printed on a platen or a flat bed press, the printer first locks his yellow plate in the press and runs off his first impression, printing only the yellow. Then he removes the yellow plates and puts the red in its place for the second run. If the two impressions are now examined under a magnifying glass it will be seen that the picture thus far is made up of red and yellow dots. In the areas where the plates have overlapped it will be noticed that the orange hue is not due to the printing of one dot over the other but of the printing of red dots beside the yellow dots.

If the job is a three-color one, the blue plate follows and prints its blue dots in its own areas, and alongside the red or yellow dots in the mixed areas to create greens or purples. In a four-color job the black is printed before the blue, because if black is used last it might darken the tones of the greens and there would be no chance to rectify it, but if the blue is run last the right hue may be used to bring out the proper tone of green. The result of the four impressions is a colored reproduction of the original picture.

In newspaper color work the color plates are frequently zinc line engravings. Stereotype plates are made for each color plate and clamped on successive cylinders in the press. The web of paper runs through them in their order, getting the yellow impression from the first, the red from the second, and the blue from the third, the fourth printing the black of the picture and the accompanying text as well.

### ROTOGRAVURE

So many newspapers are now getting out Sunday rotogravure sections that it is well for every newspaper man to know something about this process. Photogravure is the reverse of the relief printing, which has been studied thus far in this chapter. In this case the ink lies in incised hollows, the raised surface is wiped clean, and the paper is laid on top to be inked where it touches the ink-filled hollows. This is called intaglio printing. When this process is done on a rotary press, it is called rotogravure.

[9] Grant M. Hyde, *Newspaper Editing*, p. 323.

In preparing the rotogravure printing cylinders, whole pages of text and pictures are photographed, and the film stripped from the negatives is placed on a large copper roller which is then etched with acid, producing a surface just the reverse of the relief plate. The lines or dots of the pictures and text are incised below the surface of the cylinder instead of standing out in relief.

In printing, these cylinders are automatically inked as they revolve. One side of the cylinder passes through an ink bath that fills the impressions of the intaglio engraving. As this side comes up, it comes in contact with a knife-like arrangement, called the "doctor," which cleans off all surplus ink on the surface of the cylinder. The paper which passes over it then lifts out the ink from the hollows. As the web progresses it goes through an elaborate drying process and emerges from the press folded, cut, and ready to be delivered. The resulting surface is much finer and softer than that produced by the half-tone. It is modulated almost like a photograph because of the varying depths of the ink-filled hollows in the cylinder. Best success seems to be secured with sepia or gray-green inks rather than black in rotogravure printing.

The latest development is the "coloroto" process, first perfected by the *Chicago Tribune*. In this process the color plates are etched in intaglio on successive copper cylinders, and the paper web passing over them receives one color at a time.

The printing of rotogravure sections requires very expensive equipment. Special presses must be used, and after each printing the copper cylinders must be turned down by lathes to remove the previous engraving. Only the larger newspapers have their own rotogravure equipment. Many papers have their roto sections printed by special commercial plants which do rotogravure work for a number of papers.

### SUGGESTIONS FOR THE STUDENT

1. Check through a daily newspaper and a magazine to identify the different types of duplication and reproduction processes that have been used.
2. Clip out all pictures from one issue of a newspaper and practice marking proper specifications for the engraver.

3. Visit the stereotyping department of a local newspaper and follow through the various steps explained in this chapter.
4. Inspect a photo-engraving plant and also, if possible, an electrotyping plant. Engravers are usually glad to let students follow the process of plate-making from the photographing of the original copy to the production of the finished plate.

# CHAPTER XIII

## PRINTING PRESSES

IN the previous chapter the progress of the page form on a daily newspaper was traced through the stereotyping department where the curved page-plates are cast. The newspaper page is now ready for the final step in newspaper making, the printing of the stereotype plates on the rotary press.

The man or woman who is going into newspaper work should have some idea of the development and operation of the presses which have made this profession possible. If it were not for the development of modern high speed rotary presses, capable of printing from a continuous roll of paper instead of one sheet at a time and of turning out hundreds of thousands of complete newspapers per hour, newspapers today might still be small four- and eight-page sheets with little room for advertising and with circulations limited to a few thousand.

Editors, furthermore, can hardly expect to direct printers and pressmen intelligently unless they understand something of this mechanical side of their business. The young man who advances to a higher executive position will of necessity have to pay increasing attention to the mechanical departments, for that is where the greatest costs of operation are involved. The press itself is usually the most expensive part of a newspaper's equipment.

The man who is contemplating buying a smaller newspaper will do well to give much more extensive study to presses than there is room for in this discussion, for the press is the most vital part of his plant. Newspapers that are saddled down with the wrong kind of press for their field and its opportunities are sadly handicapped. The wrong kind of press first bleeds a paper of its legitimate profits, and then blocks the way to reform by being so large and so expensive an item in itself that it is hard for the publisher to finance a suitable replacement.[1]

[1] Eric W. Allen, *Printing for the Journalist*, p. 150.

It is not necessary, of course, for the newspaper man to know every mechanical detail of these presses, but he should know something about the general principle of their operation and something of the historical development of the press. What he can get out of his machine in the way of a finished product is what the editor is interested in, rather than why this particular mechanism is operated by this lever or that.

### THE FIRST PRESS

When Johann Gutenberg first began printing from movable types he tied his little blocks of type together with fine wire and cord. Then he hit upon the plan of putting them in a wooden frame and holding them together with little wooden wedges. His first printing was probably done by rubbing the back of the paper, placed upon the type form, to get an inked impression on the other side. In time he substituted a padded block and mallet crudely resembling the proof-planer and mallet used in printing shops today.

It is not certain that Gutenberg invented the first printing press, but he did build one by adapting the wine press of his day to printing purposes. It consisted of two upright timbers reaching from floor to ceiling, with cross pieces to hold them at top and bottom. At about waist height another cross timber supported a flat wooden bed upon which the type was placed. Higher up was still another cross timber through which a wooden screw was passed. The lower end of this screw rested on the center of a heavy wooden platen which was pushed down on the type by turning the screw with a hand lever.[2]

Printing with this crude press was slow work. After the type form had been locked with wooden wedges in a frame called a "coffin," it was carried to the inking table in front of the press. Here it was carefully inked with a pair of pelt balls made of leather and padded with wool. Then a paper was placed upon the form and pressed down at the corners so that it would not fly off. The type form was now carried to the press and carefully pushed out on the bed. Then a pad was placed over the paper to prevent its being marred by the pressure of the platen. When

[2] Robert Hoe, *History of the Printing Press*, p. 6.

GUTENBERG'S PRESS AND PRINTING ROOM AS RECONSTRUCTED IN THE GUTENBERG MUSEUM BY GUSTAV MORI

everything was in position the pressman seized the lever and with several turns of the screw brought the platen down on the paper. The entire process now had to be reversed. The platen was raised and the type form returned to the inking table. Here the paper was carefully lifted and hung up to dry, while the form was inked for another impression. This first press had little advantage in the way of speed over the hand imprint, but it furnished a more even impression with less care on the part of the printer.[3] Only after the first impression had dried could the paper be turned over for printing on the reverse side.

### THE BLAEW PRESS

This simple form of wooden screw press continued in use without any material change for about 150 years or until the early part of the seventeenth century. Of course, some improvements were made. Woodcut illustrations of printing presses in books published as early as 1522 show that, while the press of that day still had a stationary bed, the bed had been extended to include the inking table.[4] This of course had the advantage of enabling the pressman to slide his type form back and forth on the same level instead of having to carry it back and forth from inking table to press. There also had been added to this long bed a hinged cloth-covered framework or "frisket," which could be lowered over the paper to keep it in place and also to serve in place of the old blanket or pad to protect the paper from being marred by the platen.

The first recorded improvements in the printing press are credited to William Janszoon Blaew, a map maker and printer of Amsterdam,[5] who about 1620 is said to have invented a movable bed arranged to slide on a greased track so that the form could be easily moved from under the platen for inking.[6] Blaew also devised a new form of iron hand-lever, designed to give greater pressure to the screw and platen. Blaew's press was introduced into England and used widely there as well as on the Continent. This was the kind of press used by Benjamin Frank-

[3] Grant M. Hyde, *Newspaper Editing*, p. 306.
[4] Book printed by Jodocus Badius, Paris, 1522.
[5] John Clyde Oswald, *A History of Printing*, p. 334.
[6] Hoe, *op. cit.*, p. 6.

lin. It required nine separate hand operations and was capable of turning out at most 350 "pulls" an hour.[7]

### THE FIRST IRON PRESS

The next step forward was the Stanhope Press, brought out by the Earl of Stanhope in England in 1798. Instead of being made of wood, the frame was a solid piece of cast iron. This press still used the screw, but had added to it a series of levers to assist the pressman in getting greater pressure with less effort. The platen also was of metal.[8] With twelve such presses operated by twenty-four men, the *London Times* in 1814 got out its edition of 10,000 copies in about six hours.[9]

PETER SMITH HAND PRESS

Printers now turned their attention to the screw, to see if possibly the platen could be brought down without successive turns. In 1816 an American, George Clymer of Philadelphia, devised an iron press which entirely dispensed with the screw

[7] Hyde, *op. cit.*, p. 306.
[8] Hoe, *op. cit.*, p. 7.
[9] Hyde, *op. cit.*, p. 306.

but obtained pressure instead by a series of compound levers. Clymer's press, called the "Columbian," was larger and stronger than Stanhope's and could be worked with greater ease.

Then in 1822 another American, Peter Smith, connected with R. Hoe & Company, devised a press that exerted pressure on the form by the straightening and elongating, with a pull of a single lever, a toggle-jointed bar. The idea was so simple that it seems but a step from the screw, yet it took nearly 400 years to develop.[10]

The Smith press was supplanted in 1827 by the Washington hand press, the invention of Samuel Rust of New York. This had a bolted frame to secure greater strength, and a windlass to move the bed back and forth. It was equipped with a simpler toggle joint, and the platen was lifted by strong springs on either side. A new and improved tympan and frisket were added, and later this press was equipped with rollers to automatically ink the form as it was pulled back and forth on its movable bed. The Washington press was the best of the hand presses and it is still to be found in engraving plants and some printing plants where fine proofs have to be taken.

Almost all of the early American newspapers were printed on hand presses of various kinds. Some of them were very small affairs, but early editors did not publish large papers, and furthermore it was often convenient to have them small enough so that they could be moved easily, for if the editor could not make his paper go in one town he could quickly load his little press and his few cases of type into a cart and journey on to the next place.

### STEAM PRESSES

Meanwhile steam power had come into use, and printers and inventors at once set to work figuring some way to hitch steam power to the printing press. But that was a problem, since it involved adapting the press to the continuous motion that steam power requires and synchronizing the movement so that the platen would be driven down on the type form at the exact moment when the bed had moved it into position beneath.

The first man to successfully apply power to the "bed and

[10] Oswald, *op. cit.*, p. 338.

platen" type of press was Daniel Treadwell of Boston, who in 1822 brought out a press in which the type was placed on a bed, as in the hand press, and this bed was raised and lowered by straightening and bending a toggle joint by means of a cam, thus giving the impression against the platen fixed above it. Treadwell's press did not come into general use, but the Adams press, operating on the same principle, patented by Isaac Adams of Boston in 1830, was very popular for a number of years for fine book printing. It was equipped with a new device of tapes which carried the paper over the form when the bed rose and then permitted the sheet to be passed forward to a sheet flier, which delivered them on the fly board. One thousand sheets an hour was the maximum speed of the larger types of Adams presses.[11]

### THE ADVENT OF THE CYLINDER PRESS

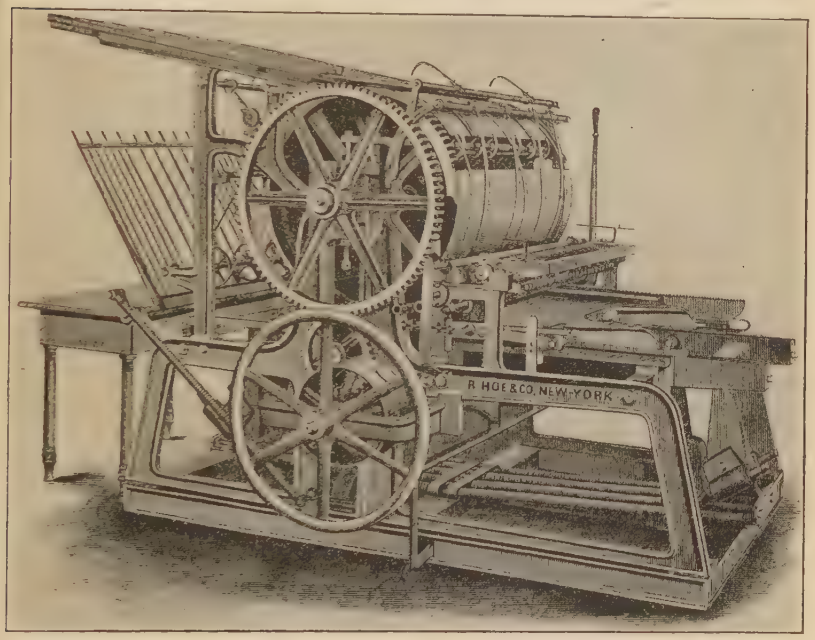
While the bed and platen type of press was quite satisfactory for fine book and job printing, it was still too slow for newspaper work. On the daily papers, in particular, there was demand for presses that would print with great rapidity, and there was still too much time being wasted in raising and lowering the beds or platens in presses like those of Adams and Treadwell.

European inventors had not been idle, and one of them, a Saxon ex-printer named Friedrich Koenig, developed a press on an entirely new principle. Koenig, after being unable to get financial backing for his idea on the continent, had gone to England in 1806, and after a long period of discouragement secured the active interest of Thomas Kingsley, one of London's prominent printers. The result was the completion in 1811 of the first cylinder press.[12]

This press had a movable bed which carried the type form back and forth to be inked between each impression. Above the bed, instead of a platen, was a large cylinder with a three-stop motion. The paper was fed in on top of the cylinder, and the first third of the turn received the sheet and secured it by the frisket; the second third of the turn brought the paper down on the type form to receive the impression, while the third allowed

[11] Hoe, *op. cit.*, p. 12.
[12] Oswald, *op. cit.*, p. 339.

the sheet to be removed by hand while the cylinder returned to its first position to receive a new sheet.[13] During this last third of the turn and the first third of the succeeding turn the bed was shuttled back so that its type form might be inked and then returned again into position in time to give an impression to the sheet of paper rolled down over it on the second third of the turn. The inauguration of this new system of printing marked a new era in the history of the printing press.




SINGLE LARGE CYLINDER PRESS

In 1814 Koenig patented a continuously revolving cylinder press. In this machine the side of the cylinder that was not used to give an impression was flattened, thus permitting the bed to shuttle out and back without stopping the cylinder. In the same year he developed a two-cylinder press which would print both sides of the paper at the same time. The two cylinders were placed side by side in the center of the press. Underneath was a long bed, at either end of which was placed a type page form,

[13] Hoe, *op. cit.*, p. 16.

so that as one form was shuttled under the cylinder the other came out to be inked. The paper, after being printed on one side by one cylinder, was carried by tapes over to the other cylinder moving in the opposite direction, where it was printed on its reverse side. This was called a "perfecting press."

Two of Koenig's double-cylinder presses were set up in the plant of the *London Times*, and on November 29, 1814, in this office for the first time a newspaper was printed on a cylinder press. The occasion marked also the first time that a steam engine had been used as the motive power for newspaper printing.[14] Because of the antagonism of workmen to the idea of substituting steam power for manual labor, Koenig's experiments had to be conducted in a separate building and under the greatest secrecy. Not until the first edition was off the press were the workmen informed that "The *Times* was already printed by steam," and that if they "continued peaceable their wages would be continued till similar employment would be secured for them." The event was heralded by the *Times* as a "hazardous undertaking successfully carried through, which gave to the world printing by steam on an almost gigantic scale." The gigantic scale was 1,100 copies per hour.[15]

### THE NAPIER PRESS

Meanwhile others were busy perfecting the cylinder press. The next great improvement came in 1830 when D. Napier, an English press manufacturer, brought out a press with smaller cylinders, which permitted greater speed. The cylinder made two revolutions for each sheet printed, and during the second revolution a system of toggles raised the cylinder to permit the type form to run back without touching, then let it down again to print on the form. Another feature of the Napier press was that for the first time, instead of tapes and strings, a system of grippers or fingers was used to convey the sheets around the cylinder during the impression and to deliver them after printing.[16]

News of these inventions in England came to America, and in 1832 Robert Hoe & Company sent a representative to England

[14] Willard G. Bleyer, *History of American Journalism*, p. 393.
[15] Oswald, *op. cit.*, p. 340.
[16] Hoe, *op. cit.*, p. 17.

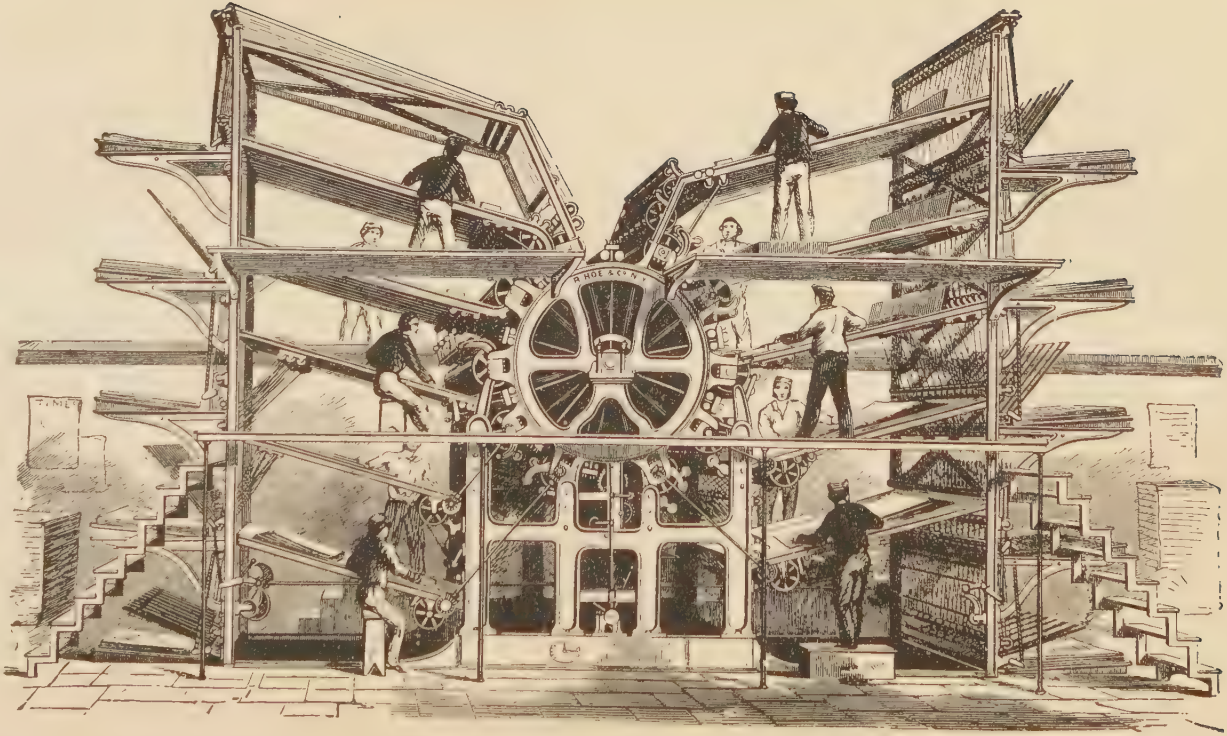
to bring back the latest improvements. As a result, this firm perfected the English inventions and in the next few years developed the various types of single- and double-cylinder presses which, with some improvements, are still in use today, and which American printers generally call flat bed presses.

The output of these first Hoe single-cylinder presses reached 2,000 impressions an hour or about as fast as a feeder could lay down the sheets. As newspapers demanded more speed the double-cylinder presses were installed. By feeding from both ends it was possible to print up to 4,000 sheets an hour. Growing circulations of newspapers compelled them to follow the developments in presses as fast as they came out. The *Philadelphia Public Ledger,* for instance, started in 1836 with a little hand press. In six months it had acquired a circulation of nearly 8,000 and had to install a Napier single-cylinder press. Less than a year later it had to discard this for a double-cylinder press.[17] In 1845 James Gordon Bennett, editor of the *New York Herald,* boasted that with his 12,000 circulation he had the largest aggregate circulation of any journal in the civilized world and that he had to have four double-cylinder presses with four men to each press to get his paper out every day.[18]

### THE TYPE-REVOLVING PRESS

But even double-cylinder presses were not fast enough. To meet the demands of newspapers, Hoe & Company brought out a new invention known as the Hoe Type-Revolving Press, and the first one was installed in the office of the *Philadelphia Public Ledger* in 1846. The basis of this invention was the substitution of a horizontal cylinder for the flat bed, in which there were counter-sunk slightly curved cast iron beds, one for each page in the paper. The type matter was mounted on these beds and by means of wedge-shaped column rules was locked into place so tightly that it would not fly out, even though the cylinder was rotated at high speed. The curved beds or "saddles" gave a curve to the surface of the type, so that a cylinder surface formed a true circle instead of a series of flat surfaces. Around this central cylinder smaller impression cylinders were grouped. The sheets

[17] Bleyer, *op. cit.,* p. 178.
[18] *New York Herald,* July 30, 1845; Aug. 15, 20, 1845.



TEN CYLINDER ROTARY TYPE-REVOLVING PRESS

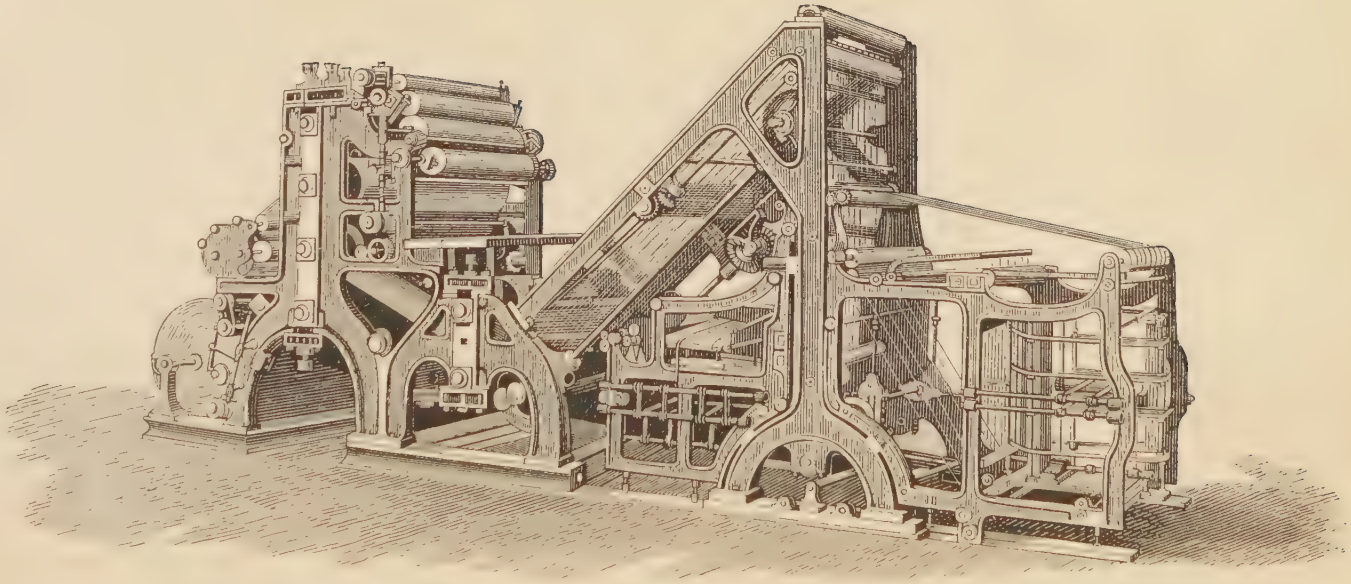
were fed in by boys and taken from the feed board by automatic grippers, which carried them between the impression cylinders and the revolving form of the central type-cylinder. The first of these presses had only four impression cylinders, necessitating four boys to feed the sheets, and turning out 2,000 sheets per boy or 8,000 sheets per hour, printed on one side. In 1849 the *New York Herald* installed one with six impression cylinders capable of printing 12,000 sheets an hour. Other New York papers followed suit. Some had presses with as many as ten cylinders, and with ten feeders it was possible to get up to 20,000 impressions an hour.

### INFLUENCE OF THE TYPE-REVOLVING PRESS ON NEWSPAPERS

This was the type of press used by most of the larger American newspapers until well after the Civil War. As has been pointed out in a previous chapter, it was the type-revolving press that enforced the system of vertical display used by all the newspapers of the period. It would have been impossible to hold any type matter set in two- and three-column widths on the flying cylinder, because the curve would have been too great to give the wedge-shaped rules on either side the necessary purchase. A new type of press had to be devised before newspaper make-up could develop horizontal display. Even then the custom of vertical display had become so ingrained on American newspapers that it was years before any of them ventured to break their single-column rules.

### THE ADVENT OF STEREOTYPE PLATES

In the meantime the experiments in stereotyping, described in the previous chapter, had been going forward. James Dellagana, a London stereotyper, had produced curved column plates to be used instead of the columns of loose type on the type-revolving press of the *London Times*. By 1854 Charles Craske, an American engineer, had produced curved stereotype plates of entire pages for the type-revolving presses of the *New York Herald*. This new development enabled publishers to cast duplicates of their type page forms and to run several machines at the same time, thus multiplying the output of their plants. The *New York*



LONDON TIMES ROTARY MACHINE

*Herald,* just before the Civil War, had five of these type-revolving presses, printing from stereotype page plates, in constant operation.

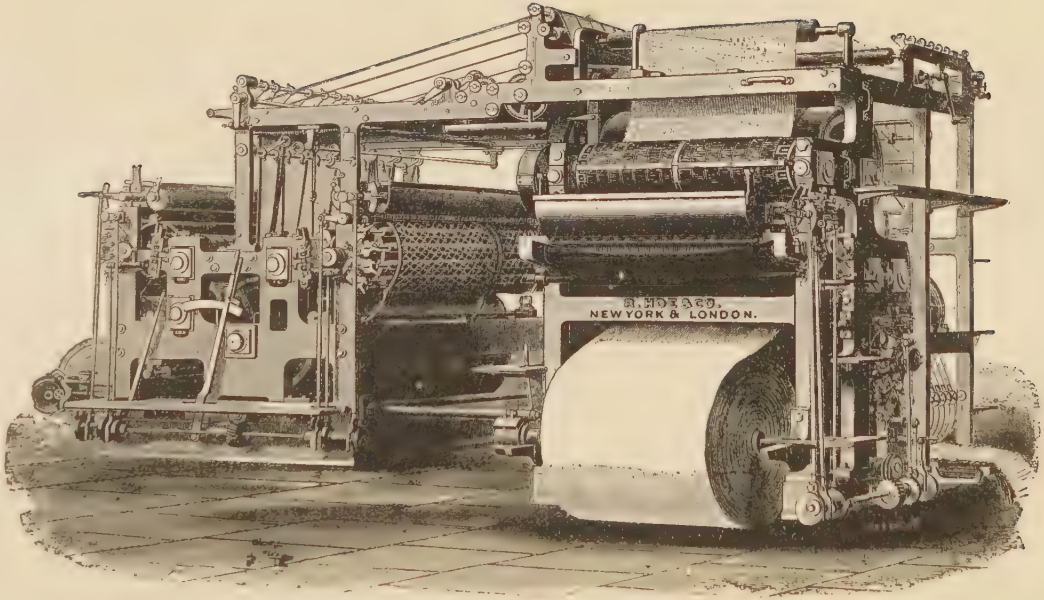
A revolution in newspaper publishing took place. Newspapers, which before had been limited in their circulation because of their inability to print enough papers, now expanded rapidly. Many new papers were started. But as circulations grew, the capacity even of the type-revolving presses became inadequate. For one thing, they printed the sheets of paper only on one side, and they required too much labor to operate them, with one feeder necessary for each impression cylinder.

### THE WEB PERFECTING PRESS

The solution to the problem of feeding the press came from the paper manufacturers, who in 1861 perfected their paper-making machines to the point where they could turn out paper in continuous rolls instead of separate sheets. This opened an entirely new avenue of press development, since it would now be possible to run the web of paper continuously through the impression cylinders. The question of rapidly cutting off and delivering the paper, however, remained an obstacle until 1865, when William Bullock of Philadelphia produced the first printing machine to print from a continuous web or roll of paper.[19] It consisted of two sets of cylinders, each set made up of one impression cylinder and one on which the stereotype plates were clamped. The paper was fed in from the roll, but was cut into sheets by knives in cylinders before it reached the printing cylinders. The sheets were carried through the press by grippers and tapes, and came out printed on both sides. The Bullock press, however, was not reliable in its delivery of sheets and was rejected by many papers that had installed it.

Then the *London Times,* in 1868, developed the first successful rotary web perfecting press, called the Walter press. Paper was fed from a single roll and passed between two sets of cylinders, each set consisting of a printing cylinder on which the stereotype plates were clamped, an ink roller revolving against this cylinder, and an impression cylinder to press the paper against the printing plates. The two sets of cylinders were placed

[19] Oswald, *op. cit.,* p. 344.




DOUBLE SUPPLEMENT PRESS

one above the other, so that as the paper web passed between them it was printed on one side by the lower set and on the reverse side by the upper set. As the paper emerged after printing, each section of pages was cut apart into separate sheets, which were carried by tapes down to a "sheet flier" that moved back and forth, "flirting" the sheets alternately into the hands of two boys, seated on either side of the flier, who folded them.

### THE HOE ROTARY PRESS

Meanwhile Hoe & Company in America had turned their attention to the rotary press, and in 1871 produced a much improved rotary, a feature of which was an automatic cutting and folding attachment at the delivery end of the press. The first one in this country was installed by the *New York Tribune*. It was capable of delivering 18,000 printed and folded papers per hour. In 1875 Stephen D. Tucker, of Hoe & Company, developed a rotating folder which permitted still greater speed in the delivery of papers. These improvements, however, were but the beginning of a long series of experiments looking toward faster presses.

A new departure came in 1882, when Hoe & Company produced their Double Supplement press which printed from two rolls of paper at the same time. The first of these machines was promptly purchased by James Gordon Bennett and installed in the *New York Herald* office. It was constructed in two units built at right angles to each other, the cylinders of one unit being twice the length of those in the other. If only an eight-page paper were desired it could be printed on the first unit, but should an extra supplement of pages be needed this could be printed on the second unit and folded within the first section.

The paper from the roll in the first unit passed between an impression cylinder and a printing cylinder on which were clamped four stereotype page plates, two on a side. This printed four pages on one side of the web. A little further on it ran through a similar set of cylinders, which printed four pages on the reverse side of the web, exactly backing up the first four. Meanwhile the web of paper in the other unit of the press had passed through two smaller sets of rollers, which had printed two pages on each side. The two broad ribbons of paper were

now brought together over turning bars and laid evenly one over the other. Together they passed down through a triangular "former," which folded the paper along the center margin and pasted the two sections together along this fold. They were then taken over a final cylinder, from which a revolving blade projected to thrust the paper between folding rollers, while at the same moment a knife in the same cylinder cut each twelve-page section apart. A rapidly revolving mechanism, resembling the fingers of a hand, carried each folded section forward on a traveling belt which conveyed them to the delivery room. This press was capable of turning out either four, six, eight, ten, or twelve page papers at the rate of 24,000 an hour.

Once the multiple rotary idea had been demonstrated, development was rapid, for it was evident that the capacity of the rotary press could be multiplied indefinitely by merely adding more sets of printing cylinders.

### MULTIPLE ROTARY PRESSES

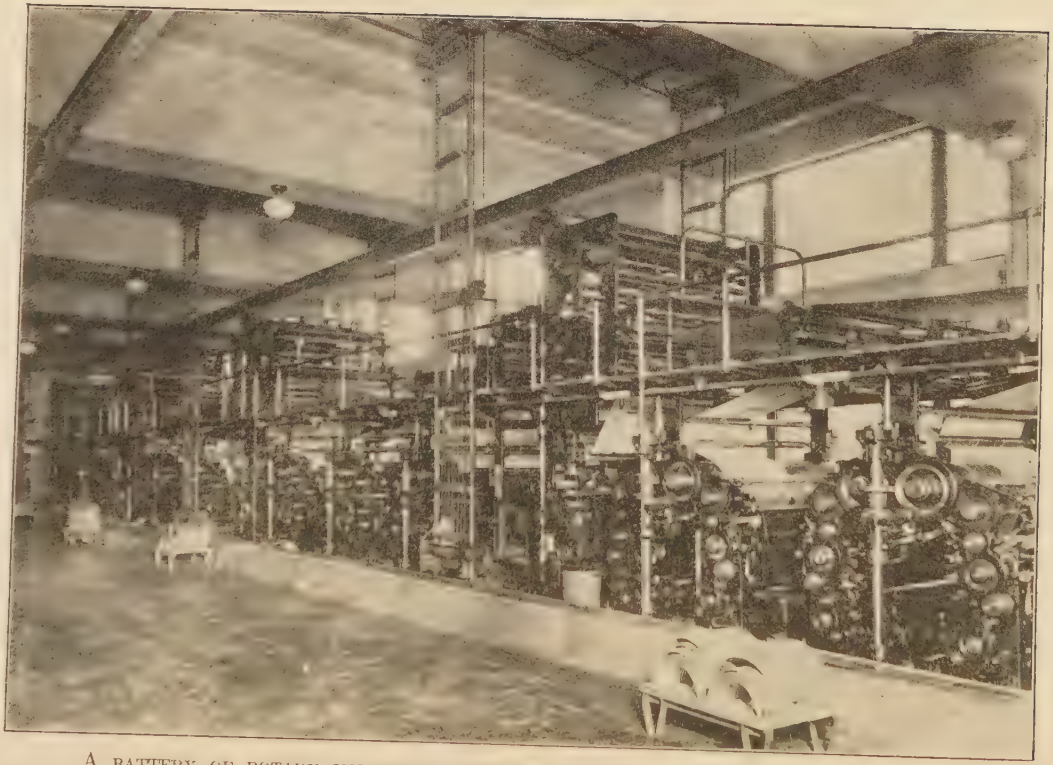
There followed in 1887 the first sixteen-page press, known as the Hoe Quadruple Newspaper Press, built for the *New York World*. It carried the idea of the Double Supplement press still further by increasing the width of the cylinders in the second or supplement unit. Thus each unit printed from two sets of four-page cylinders, producing together two eight-page sections, which, when folded, made a sixteen-page paper. This press could turn out 24,000 ten, twelve, fourteen or sixteen-page papers an hour, or 48,000 eight-page papers per hour.

It was thought that the limit of printing capacity had been reached with this press, but in 1889 a Sextuple Press was built for the *New York Herald*. It was different from its predecessors in that all units were placed parallel to each other instead of at right angles as in the quadruple and double supplement presses. It consisted of six sets of cylinders, each printing cylinder carrying eight stereotype plates. It printed from three rolls of paper, one feeding in at each end and one in the center. This press could print, cut, paste, fold, count, and deliver 72,000 eight-page papers, 36,000 sixteen-page papers or 24,000 twenty-four-page papers per hour. In sixty years since the invention of the Washington hand press, then hailed as a mechanical triumph, the capacity of the printing press had been multiplied 2,000 times.

Then in 1895 came the Octuple Press, with eight sets of four- to eight-page cylinders printing from four rolls of paper and capable of turning out sixty-four-page newspapers at one time. It was equipped with four folding and delivery machines so as to quadruple the number of smaller page sections turned out, producing 96,000 four-, six-, or eight-page papers, 72,000 ten-page papers, or 60,000 twelve-page papers per hour.

Other firms, notably the Goss Printing Press Company, were now entering the field to produce rotaries in ever increasing combinations. There came soon the Decuple, made up of a sextuple and quadruple set end to end and feeding into common folders set in the center. Then two octuples were built together to make the Improved Combination Octuple and Color Machine, which, in addition to giving the regular Octuple production in black, would turn out four-page papers in several colors. Next, a double-sextuple was built for the *New York Journal,* with twelve eight-page cylinders capable of producing in one hour 96,000 twelve-page papers in black, or 48,000 sixteen-page papers in color. For a time the Duo-decuple press, printing from as many as nineteen different rolls of paper and producing 150,000 eight-page papers an hour, seemed to have achieved as much capacity as newspapers could possibly need, but increasing circulations developed ever increasing combinations of rotaries, until the press rooms of some of our great metropolitan papers today are almost a half a block in length, the presses are built up several decks in height, and are capable of producing hundreds of thousands of 16-, 24-, 32- and 48-page papers per hour.

Because of the individual requirements of different newspapers and the varying space arrangements in different press rooms, these combinations are built especially to suit each paper. The two sections of a double octuple, for instance, may be built at right angles to each other, or they may be built end to end in tandem fashion. Where economy of space is necessary, the units of a press may be built one above the other in a series of decks. If the paper passes directly through the press and comes out in a folder at the other end of the machine, it is called a straightline press. If the webs from the several units come together in folders in the middle of the press, it is called a center-fold installation. A publisher's choice is usually determined by his pressroom accommodations.



A BATTERY OF ROTARY UNIT-TYPE PRESSES IN THE MILWAUKEE JOURNAL PLANT

### UNIT ROTARY PRESSES

Beginning in 1911 with the installation by Walter Scott & Company of the first low unit-type press in the plant of the *Worcester* (Mass.) *Telegram*, press manufacturers began developing presses built in units, each consisting of two "printing couples." A printing couple, it may be explained, is made up of one printing cylinder and its companion impression cylinder. These units were built shoulder high, in order to be within reach of workmen on the floor, thus facilitating both paper and plate handling. The unit press proved very adaptable to varying newspaper needs, for publishers could easily add units to their press as circulation demands made it necessary.

These units may be set end to end or arranged in rows. In some plants they have been superimposed above each other. Larger metropolitan newspapers may have as many as thirty to forty such units. In 1922 there was introduced the Balcony press, with the printing units supported on an integral cast iron structure, and the paper rolls and folders on the floor level below the printing units.

### NEW HIGH SPEED PRESSES

The year 1908 marked the beginning of the era of modern high speed printing presses. In that year Hoe & Company produced a high speed camless folder, capable of folding papers at any speed at which a press could be run. Press production for a long time was limited by the ability of the folders to handle the output of the printing units. Many improvements in folding machinery have been made in recent years, some of the most notable by the Goss Printing Press Company and Walter Scott & Company, all of which have contributed to the increase of press production. A metropolitan press installation today frequently has as many as twenty-five or thirty folders to expedite delivery and to permit separate sections of the Sunday paper, for instance, to be run in colors and assembled separately during the week while the daily paper is being printed in black.

Among the leading experimenters in the development of high-speed printing units has been Henry A. Wise Wood, the inventor, who proved that it was not the newsprint web that could not withstand the strain of speed but the presses themselves that

were not designed to handle newsprint at high speed. While their paper-handling parts moved in harmony at lower speeds, they lost step at higher speeds and tore the sheet apart. The new Wood Press, installed by the *New York Times* in 1928, is successfully turning out a product of high typographic excellence at a considerable increase in speed of production. Hoe & Company and other press manufacturers are likewise bringing out new high speed presses, and new refinements and improvements are being announced every year. The circulation of America's daily papers has increased by 10,000,000 copies in the last seven years. Improvements in presses not only have kept pace with circulation every step of the way, but will make possible increasing circulations in the decade to come.

### ROTARY COLOR PRINTING

Color printing on a rotary press is an interesting process. On smaller job and cylinder presses, when one color is finished the press must be washed and re-inked with the new color, the new color plates must be placed in the form, and the whole process repeated. On a rotary it would not be practical to send the web of paper through the press again for each new color. Instead, the color plates for the first color are clamped on the printing cylinders of the first unit, and its ink rollers are inked with this color. Second and third colors with their color plates go on successive units of the press, and the paper web passes through one set of cylinders after the other receives these colors in their order. Care must be taken, of course, that the plates register in such a way that successive colors will fall in exactly the right place. Failure to register is seen at times in comic strips where colors sometimes overlap outside the figures that they are supposed to cover.

### THE FINAL PRINTING OPERATION

The last mechanical operations in completing a newspaper edition on a large daily are figured in split seconds. From the time the front page forms are closed and sent to the stereotypers not more than eight or ten minutes elapse until the presses start rolling. Every step clicks in perfect clockwork.

As the stereotype plates are delivered one by one from the autoshaver, they are immediately carried to the press units where

they are to be used. Here a pressman slips each plate into its proper place on the cylinder. It will be remembered that one of the operations, in finishing the page plate, was to bevel off the sides of each plate. In the plate cylinder are steel clips which fit tightly over these beveled edges. When the plate is in place, all the pressman has to do is to slide the clips over the edge of the plate, and with a half turn of a T wrench these clips are made secure. In some presses a single turn of a lever will instantaneously lock all the plates on a cylinder.

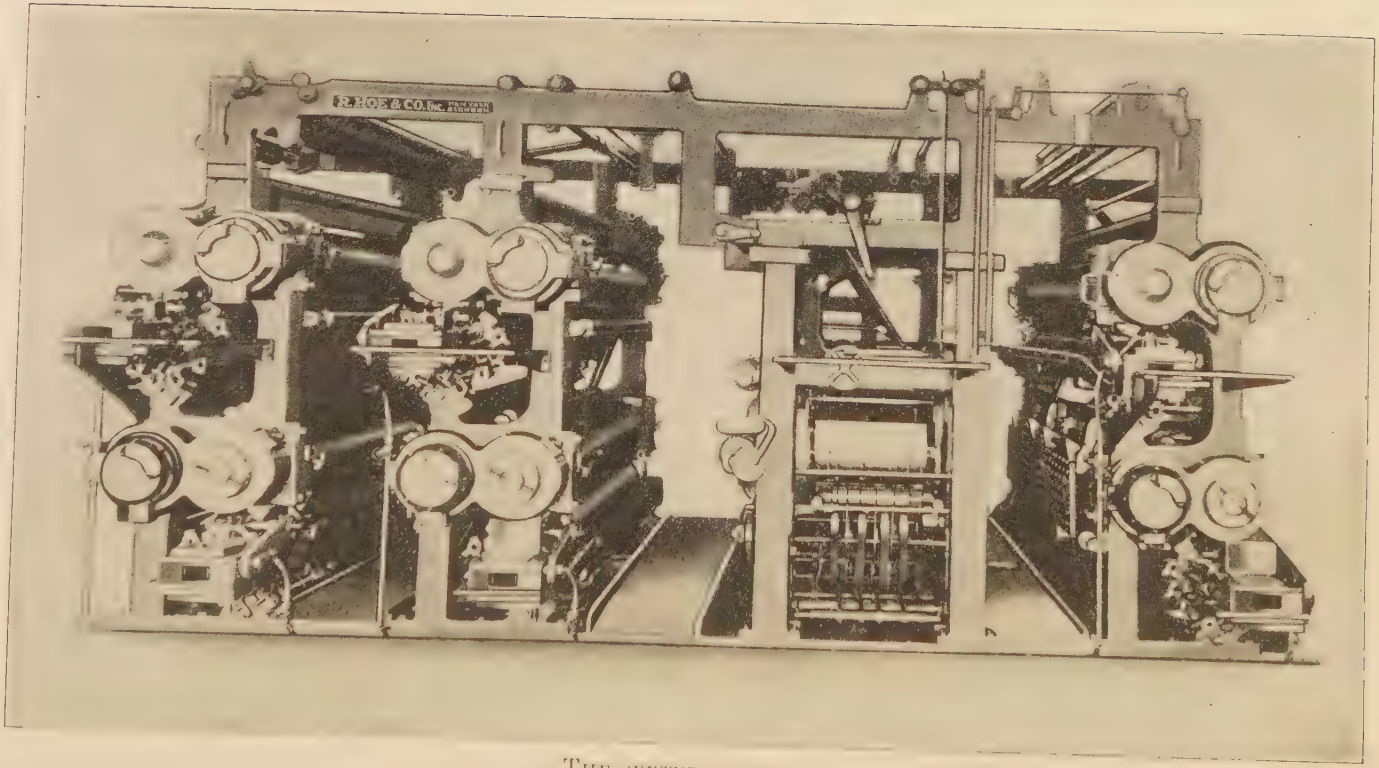
To speed up production, several plates of each page may be cast and each used in a different printing unit. With several units printing the same section of the paper at the same time, it can readily be seen that the delivery of papers can be multiplied many times.

Like all modern presses, rotaries are electrically driven and their running is governed by a most complicated electrical control mechanism. When the final or "starter" plates are delivered to the pressman, all that remains is to clamp these into place, then the foreman flashes his signal lights or rings his signal bells to warn all workmen to get out of the press. When all is in readiness he pushes a button and the presses start rolling.

Almost immediately finished newspapers start issuing from the folder. The first few, of course, will be "spoils" until the web has had a chance to pass through the printing unit, but as the press speeds up, complete newspapers are turned out so fast that the eye can hardly follow. Every fiftieth or one-hundredth paper is turned slightly askew by an automatic "kicker" in order to facilitate the making up of bundles of given content. As the papers issue from the folder, they are carried forward on a continuously moving conveyer, which in many metropolitan press rooms winds upward to the ceiling over the top of the press to the distributing rooms of the circulation department.

### PRESSES FOR SMALLER PAPERS

Only the larger daily papers, of course, are printed on the complicated multiple rotaries which have just been described. For dailies with circulations of 25,000 to 50,000, quadruple and sextuple rotaries will serve efficiently. Even for the small town daily it has become almost necessary to complete the press run



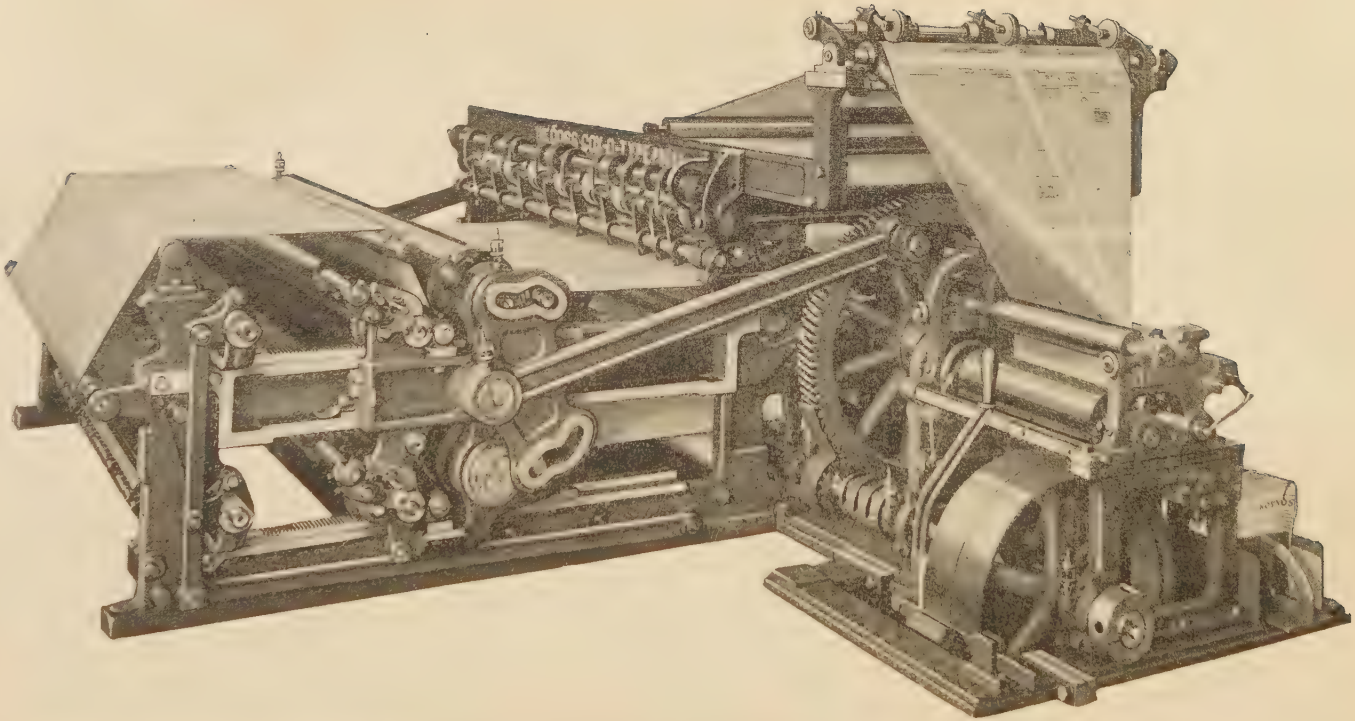

THE SEXTUPLE PRESS

This press is used by many daily newspapers of intermediate size.

within an hour, and press equipment therefore must keep up with circulation. The publisher today has a wide selection of excellent machines to choose from. The R. Hoe & Company, Walter Scott & Company, Goss Printing Press Company, Duplex Printing Press Company, Wood Newspaper Machinery Corporation, and a number of other good firms are furnishing presses to meet the individual needs of any newspaper.

Many daily newspapers of intermediate size find the Hoe Simplex 32-page rotary web-press an economical equipment. It consists of four 2-page-wide printing sections and is fed from two, three, or four rolls, according to the size paper that is required. Two of the printing sections are placed in line on the floor, and the other two sections are in line above. This makes for a compact press that is easy to operate and to plate, for the highest point of the upper deck plate cylinders is only about four feet above the floor. This press will print 30,000 papers an hour of 4, 6, 8, 12 or 16 pages, with sheets all inset in book form. When required, it can just as easily print the paper in two sections, collected one on top of the other when folded to page size and then folded together one within the other to half-page size. One of the economical features of this press is that its capacity can be increased step by step as circulation demand rises. The publisher, for instance, might start with a 16-page Simplex with two printing sections; then, as circulation demands, he could add 8-page units, a printing section at a time. This would insure him against the necessity of trading in his press at the end of a few years for one of greater capacity.

Another press which has proved popular with dailies both small and large because of its adaptability to their requirements is the Goss High Speed Rotary. It also is sold in units, each unit comprising one printing section of two plate and two impression rollers. Smaller dailies are able to meet their press needs with a two-unit or quadruple press. The *Kansas City Star,* on the other hand, uses thirty-six units arranged in three rows of twelve each. In the low construction style, the cylinders of this press are only shoulder-high. Units may be superimposed above each other, however, or the press may be built into the regular deck type. One of the advantages of the Goss press is its high speed folding equipment which increases the production of the press. The two-unit quadruple Goss mentioned above is capable



THE GOSS COX-O-TYPE PRESS

This latest development of presses for the country newspaper is built on the unit plan similar to the large metropolitan presses.

of turning out in an hour 36,000 papers of 10, 12, 14, or 16 pages. The *Pittsburg Press*, with its Goss equipment of thirty-two units, is able to produce per hour 157,000 papers of 64 pages each.

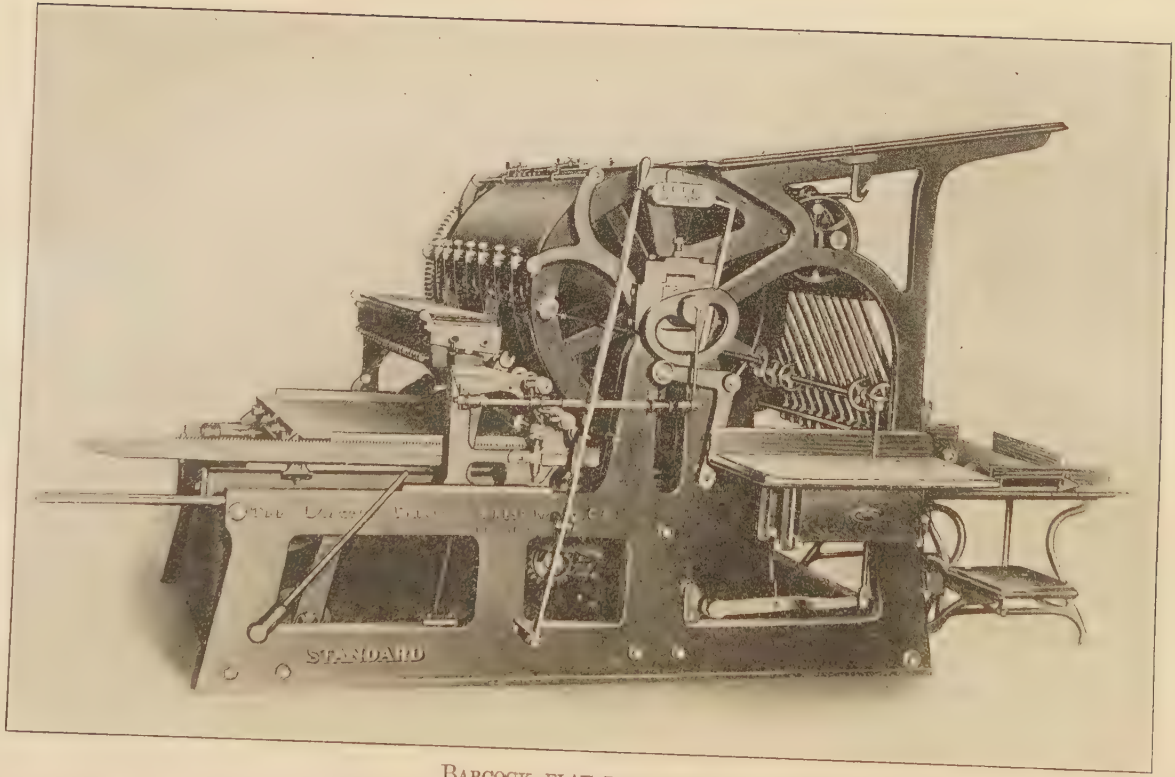
The Duplex Printing Press Company has produced a press that prints from tubular rather than semi-cylindrical plates. Its smaller cylinders turn twice as fast and produce twice as many papers with the same web speed as presses with the larger cylinders. These machines also have the advantage of being easily adjustable for two-page additions. The 24-page Tubular used by many dailies of the intermediate class will produce 30,000 papers an hour of 4, 6, 8, 10, 12, 14, 16, 18, 20, 22 or 24 pages. This firm also produces heavy-duty units that print from semi-cylindrical plates, which can be built into any combination for metropolitan papers.

### PRESSES FOR THE SMALL TOWN DAILY

Smaller dailies of 4,000 to 5,000 circulation do not need rotary press equipment. A much less expensive web perfecting flat bed press will meet their needs. This type of press, as the name indicates, prints from a continuous roll or web of paper, but from the original type forms placed upon stationary flat beds.

There are two of these beds, one above the other, and the paper web is threaded over guide-rollers, passing first over one set of type forms, to be printed on one side, and then reversing to be printed on the other side. Rotating impression cylinders roll back and forth to press the paper against the type. An ingenious device is necessary to accomplish this printing, for while the paper web is fed into the press at an even rate of speed and comes out also at a continuous even speed, it is necessary for the paper web to stop long enough over the stationary type forms to be printed. This is achieved by moving rollers which rise and fall in rhythm, taking in and paying out the slack in the paper web by lengthening and shortening the detour around which the paper has to pass.

The Goss "Cox-O-Type" or the Duplex Model "E" press are among the most popular presses of this type. Either one makes a profitable equipment for the small daily or larger weeklies and semi-weeklies. The Goss "Cox-O-Type" will produce 3,500 papers of 4, 6, or 8 pages per hour. It will turn out tabloid publications




BABCOCK FLAT BED PRESS

The familiar drum or one-revolution cylinder press found in many weekly newspaper offices.

to 16 pages, magazines to 32 pages, and bills and posters of single-page or double-page spread.

### COUNTRY WEEKLY PRESSES

Country weeklies, having no need for this high a production speed, use some type of flat-bed cylinder press that can be used not only for the printing of their newspapers, but also for larger forms of job work, such as one- and two-page bills and posters, pamphlets, folders, and broadsides.

In smaller country offices, one is most likely to find the drum or one-revolution cylinder press. The type form lies on a flat bed, which, together with a large oblong ink plate, type high, moves back and forth under the large drum or cylinder. Paper must be fed in, in single sheets, at the top of the cylinder. This drum is covered with a heavy paper or "tympan" in which are set gauges to guide the paper sheets into the proper position. Small crooked grippers grasp each sheet in turn and hold it to the drum as it revolves. When at the lowest point of the drum, the paper comes in contact with the type form which is moving on its bed in the same direction as the drum. The drum rolls the paper over the form to give it its printing impression, after which the sheet is released and delivered.

As was explained in the discussion of the historical development of the cylinder press, the bed returns to be inked while the drum completes its revolution. The latter is kept from grinding or scraping against the type by being flattened on one side. As the bed moves back, ink rollers pass from the oblong ink plate over the type form. The ink plate meanwhile is pushed back to make contact with the ink fountain, which places dabs of ink upon it. On the return motion, the ink rollers spread these dabs evenly over the ink plate, while the type form returns to meet the revolving drum for the next printing impression.

Four pages are printed at one time on one side of the sheet. After the first run, the first four page type forms are removed and the second four are locked in their place. Then the sheets are run through the press again to be printed on the reverse side. Such a press will deliver about 750 eight-page papers an hour.

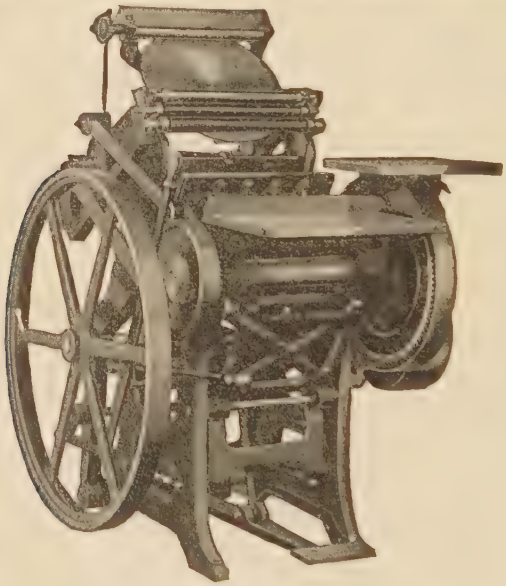
Many of the larger weekly papers use the two-revolution cylinder press. It is more expensive, but does better work and does it much faster. The cylinder in this press is smaller and turns more

rapidly, making two revolutions for each printing impression. On the first revolution, the paper sheet is carried nearly around the cylinder and is given its printing impression. On the second revolution, the cylinder rises to allow the type form to make its return trip, and as it turns it carries the printed sheet forward to be delivered at the front end of the press instead of at the rear, as in the drum press.

This type of press will deliver about 2,000 four-page papers or 1,000 eight-page papers per hour.

### PLATEN PRESSES

Another form of press to be found in most small newspaper plants which rely on job printing for part of their income is the platen or job press. It cannot, of course, be used for newspaper printing, but only for the printing of smaller forms.



THE CHANDLER AND PRICE JOB PRESS

The most common variety is the clam shell type, so called because the platen closes up against the type form much like the closing of a clam shell. In this press, the type form is locked up against an almost vertical bed. Opposite it is an inclined steel

platen, known as the tympan, covered with a packing of pressboard or paper. The top sheet of this tympan is called the draw sheet, and in it are fixed the gauge pins, which hold the paper in the proper position.

When the platen opens away from the form, the sheet of paper is fed in against the gauge pins; the platen then closes up against the form to give the printing impression. In the brief interval in which it moves away again, the first sheet is taken out and a new one fed in. Many job presses are now equipped with automatic feeding devices which insert and remove the sheets by air suction.

Inking of the type form is accomplished by ink rollers moving across a circular revolving ink disc above the type bed. At the top of this disc is an ink fountain, which feeds a dab of ink on the rollers on each return. The rollers pass down over the ink plate and across the surface of the type form in the interval that the jaws of the press are open.

The Chandler and Price Gordon press is one of the most popular of this type. In most shops having only one job press, a Gordon with a 10 by 15 inch or 12 by 18 inch printing surface is most likely to be found. Shops doing considerable job work may have two or three job presses. Presses of this type are capable of turning out about 1,000 impressions per hour.

There are many other varieties of job presses, such as the Kelley, which is a small two-revolution job cylinder press, the Miehle Vertical, which is a stop cylinder press, the Miller High Speed, which embodies the stationary cylinder instead of stationary bed movement, and the Standard Automatic and Colts Armory, which are larger, heavier presses of the platen type, but their detailed explanation is beyond the province of this text.

If the reader will remember that there are, after all, but four major classes of presses—the hand press, the platen, the cylinder, and the rotary—he will have little difficulty in identifying the different kinds he may meet. These four types represent the four major principles of press operation. No matter how complicated a press may appear, it falls into one of these classifications. If the reader will remember that, he will have an understanding of the general principles of any press he may have anything to do with.

## CONCLUSION

The printing craft has come a long way from that first crude hand press of Johann Gutenberg. Printing pioneers for centuries each have contributed their little bit to the development of typographic art. They have placed in the hands of newspaper men and advertisers today a power of the printed word undreamed of in their days of patient experimentation.

Modern newspapers could not exist if it were not for the developments of the mechanical side of their business, the composing machines, the improvements in stereotyping, the marvelous presses, almost human in their performance. The advertiser has at his command today, ready made for his purpose, typographic tools, types that can express the most varied appeals, opportunities for printed salesmanship that have become the most important factor in turning the wheels of modern business. The newspaper man, likewise, through the large circulations made possible by these inventions of the past, has achieved a power of the press through which he wields a tremendous influence in molding public opinion. All these things are our heritage from the past.

Many newspaper men and advertisers do not yet know how to work with the typographic tools they have inherited. The secret of effective advertisements and interesting and successful newspapers, however, is so closely bound up with the ability to work with type that the student who would win success in either field will do well to carry on the study that these pages have opened up.

## SUGGESTIONS FOR THE STUDENT

Visit local printing plants and observe in actual operation the different types of presses described in this chapter. Trace the progress of the paper through each step of the printing process. Study the system by which the ink is fed to the rollers and carried to the printing cylinders. Observe carefully the difference in the principle of operation among the four types of presses.

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